

Catalyzing Food Entrepreneurship: Insights for Food Incubators



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Table of Contents

Acknowledgements	2
Mission	3
Executive Summary	4
Introduction	5
Business Model	6
What is a (typical) Food Incubator?	7
Funding the Mission	7
Grants	7
Fee Structures	10
Contributions	11
Interview Insights: Funding	12
Fee	13
Structure	13
Theory for Individualized Pricing	14
Commission	15
Business Training	15
Interview Insights: Fee	17
Structure	19
Board Members	19
Interview Analysis: Board Members	20
Staff	20
Interview Analysis: Staff	21
Key Partners	22
Interview Analysis: Key Partners	23
Key Insights from Research	24
Conclusion	27
References	29
Appendix A. Descriptions of case studies interviewed	31
Appendix B. General Incubator Structure	32
Appendix C. Tiered Business Training	32

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Mission

FoodSphere, Local Root's entrepreneurial center, aims to cultivate economic growth and sustainability through the support of local farmers and entrepreneurs of value-added agricultural products.

FoodSphere's strategic plan is focused on:

- Increasing access to programs and resources to enhance the self-sufficiency and resilience of small-scale businesses focused on food production.
- Through collaborations with partner organizations, increase the economic impact of local food production and processing.

Executive Summary

This paper summarizes research done by the College of Wooster's (Local) Social Entrepreneurship (SE) Team on the structure and operation of U.S. food incubators to advise the development of FoodSphere, a food incubator hosted at Local Roots. This paper obtains insight from literature review, food incubator interviews, and analysis of incubator form 990s. We attempt to answer the following research question: How do successful food incubators organize? We categorized the research into three sections according to the needs of FoodSphere: incubator operations in terms of funding, fees, and structure.

We can draw several conclusions: In terms of funding, incubators operate with a combination of grants and other contributions and fees for services. Incubators always rely heavily on grants in their early developmental stages. Many of them move away from grant reliance as their producers become more profitable and the Incubator earns more from fees. Revenue from fee-for-service can be maximized by providing a diverse range of services above and beyond training programs, such as using the kitchen space for co-manufacturing, etc. This broader stream of revenue allows the incubator to become self-sustainable and move away from grants. In terms of fees, incubators tend to find the most success in taking a specialized fee approach that serves the specific needs of the producers. Younger and smaller producers tend to be able to afford less in fees than older and larger producers. Having a progressive approach in assigning fees such that producers pay what they individually can afford helps to optimize both revenue for the incubator and accessibility for the producers.

As for structure, specifically in terms of management, incubators are composed of board members and staff members. Successful incubators have well-informed and skilled board members who provide mission-related strategic insights, guidance, and direction to both incubatees and the incubator. Staff members are well-versed with the food industry and the functioning of the different services offered by the organization, as well as can manage the operations effectively. The board members may provide general instruction or may also lead business training for producers when needed. Staff members are given the freedom and initiative to execute the vision in the ways they see fit as long as it aligns with the overall mission of the incubator and the goals determined by the board. This workable dynamic between the two bodies is essential for the incubator to run smoothly. The SE Team hopes these insights will steer FoodSphere in a strategic and financially sustainable direction as it continues to grow.

Introduction

The Local Social Entrepreneurship Team at the College of Wooster partnered with FoodSphere, a new nonprofit organization that serves as a sister organization to Local Roots Market and Café. Located in Wooster, OH, FoodSphere mission is to “cultivate economic growth and sustainability through the support of local farmers and entrepreneurs of value-added agricultural products.” We were requested to research successful food incubators so that we may advise them on how to best set FoodSphere up for success. We were given six existing and successful Food Incubators to focus on. After some preliminary research into the incubators and in discussion with the principals of FoodSphere, we developed the following research question: How do successful food incubators organize?

Our process for answering this research question consisted of three steps. First, we conducted a literature review of academic sources that have described and analyzed the operation of food incubators across the country. The survey of the literature provided key insights that help us understand the failures and successes of incubators. They provided cases that helped to evaluate how incubators thrive in varying economic conditions, geographic locations, and population densities. Second, we looked at the Form 990s for the assigned incubators to gain a better understanding of their financial structure. Lastly, we were able to conduct interviews with three-of-six target incubators in order to obtain a nuanced understanding of their operations and the specific components of their structure that they feel best contribute to their success. The interviews demonstrated that there are a variety of ways that incubators interact with their kitchens and showed the unique ways in which incubators generate revenue and provide services for potential producers. The executives we interviewed explained their kitchen incubator start-up story and gave specific remedies for common problems that businesses involved in food processing face.

Through the analysis of all of our combined research, we discovered several key insights into how successful food incubators organize in terms of their funding, the fee for their services, and their management structure. In this paper, we use our research to construct an intuitive model for how the research suggests that successful food incubators operate.

Business Model

In order to organize our thinking about the business model, we utilize the Business Model Canvas created by Osterwalder and Pigneur (Harvard Business School, 2013). The Canvas helps us think about the building blocks of a business and can be used to facilitate strategic conversations during business start-up and growth (see Table 1). For example, comparing the revenue streams of the kitchen incubators in our sample can help us understand key insights about financial sustainability. By asking the same question of each incubator such as, what is a typical fee-for-service charge, can serve as a benchmarking exercise for FoodSphere. While we will not review all aspects of the Canvas, our research question highlights elements from four building blocks: Key Partners, Key Activities, Customer Segments, Revenue Streams, and Cost Structure.

<p>KEY PARTNERS</p> <p>Who are our key partners? Who are our key suppliers? Which key resources are we acquiring from our partners? Which key activities do partners perform?</p>	<p>KEY ACTIVITIES</p> <p>What key activities do our value propositions require? Our distribution channels? Customer relationships? Revenue streams?</p> <p>KEY RESOURCES</p> <p>What key resources do our value propositions require? Our distribution channels? Customer relationships? Revenue streams?</p>	<p>VALUE PROPOSITIONS</p> <p>What value do we deliver to the customer? Which one of our customers' problems are we helping to solve? What bundles of products and services are we offering to each segment? Which customer needs are we satisfying? What is the minimum viable product?</p>	<p>CUSTOMER RELATIONSHIPS</p> <p>How do we get, keep, and grow customers? Which customer relationships have we established? How are they integrated with the rest of our business model? How costly are they?</p> <p>CHANNELS</p> <p>Through which channels do our customer segments want to be reached? How do other companies reach them now? Which ones work best? Which ones are most cost-efficient? How are we integrating them with customer routines?</p>	<p>CUSTOMER SEGMENTS</p> <p>For whom are we creating value? Who are our most important customers? What are the customer archetypes?</p>
<p>COST STRUCTURE</p> <p>What are the most important costs inherent to our business model? Which key resources are most expensive? Which key activities are most expensive?</p>		<p>REVENUE STREAMS</p> <p>For what value are our customers really willing to pay? For what do they currently pay? What is the revenue model? What are the pricing tactics?</p>		

Table 1: Components to consider for a business model

Our insights and analysis from relevant literature sources, interviews with ACEnet, CIFT, Central Kitchen, and their associated Form 990s will be organized by the building blocks in the Canvas.

What is a (typical) Food Incubator?

Generally, a Food Incubator is an organization that catalyzes Entrepreneurship of value-added food items. The typical model includes some sort of shared-kitchen space with food processing equipment to lower the overhead costs of start-up, and a variety of training. A generalized organizational structure of a food incubator can be seen in Fig.1 (Appendix B). One common *value proposition* across incubators is that these organizations provide services for a variety of different producer types. The common element of these services includes training of some sort to increase the likelihood that the incubated will have a financially successful product that they can bring to market. In what follows, we breakdown our findings into three major categories:

1. Funding
2. Fee
3. Structure

Funding the Mission

Underlying Research question: *What is the distribution of revenue sources between grants, fee for service, dues, and contributions (gifts)?*

Grants

There are a variety of ways that food incubators fund their mission. According to Buckley, Peterson, and Bingen (2014) and Hall (2007), the main *revenue sources* are: fee for service, grants, and contributions. On average, grants are the largest of the three. Of the 12 incubators across the literature and interviews, a *key resource* to obtain grants was the USDA (Buckley, Peterson, and Bingen, 2014; Hall, 2007). The USDA was a common source for grants because it is in charge of the regulation for all agricultural endeavors in the United States. The

USDA gives federal grants to businesses in the agriculture sector that aim to invest in food community ventures. These grants are CFP's, Food Community Projects ("Community Food Projects (CFP) Competitive Grants Program | National Institute of Food and Agriculture" n.d.). While this is a specific type of grant, the kinds of grants that are available to any given incubator can depend on their *core mission*. FoodSphere's core mission is to "cultivate economic growth and sustainability." Grants are given for particular use and to achieve particular goals. FoodSphere can play to its strengths in order to obtain grant funding. FoodSphere can apply for grants that are given specifically to help food ventures in communities, like CFP's. By applying for grants catered to the specific goals of FoodSphere, it would help it further its mission and take advantage of a key resource many other incubators have found success with.

Aside from helping further a mission, grants served a more practical purpose. In the majority of cases, they were used for covering fixed costs related to the *construction* or *expansion* of facilities. Construction of a shared use kitchen or purchasing more space for tenants are the largest elements of the *revenue* of an incubator. This confirms one of the fundamental hurdles to supporting value-added food entrepreneurship: food incubators exist to lower start-up and overhead costs. Small-scale food producers often do not have the capital required to obtain licenses to legally sell food products, much less to buy the equipment needed to create these products. In addition, providing a shared-use kitchen space at a low cost decreases the individual risk of the entrepreneur and may also create positive network effects if businesses targeting common market segments can cooperate and coordinate. Anytime the literature spoke of the start-up costs, there was always a mention of a grant that provided the money. A secondary insight that comes from this conclusion is that *grants are not ever-present* in the life of an incubator. This is to say that for an incubator that has already started up and has purchased equipment and set up its facilities, it may not be necessary to receive grant money for continued operation. This explains the variety in food incubator *revenue streams*, and why they do not always have to be a non-profit organization in order to be financially sustainable. Local Roots, for example, has managed to operate with only fees for service and dues because they have passed their start-up phase and become profitable. Additionally, the need for grants also depends on the services a kitchen incubator offers. Central Kitchen's shared facility is another good example of a sustainable kitchen. While it does operate with profits, it does so mainly through

providing other services like co-manufacturing (larger businesses outsource their production to Central Kitchen’s staff).

As a recommendation, grants should be considered a necessity principally when *growth* is the topic of interest. It was uncommon for the continued renewal of grant funding for sustainable incubators. For example, Nuestra Culinary Values, which was a food incubator located in Boston, ended up being unsustainable and created a net loss for the community because they failed to sustain themselves outside of grants (Hall 2007). This is not to say that reliance on grants is unsustainable, it just puts the incubator in danger, as its financial sustainability depends on external funding. Successful incubators were able to diversify their funding sources and *took advantage* of grants to grow, as opposed to *relying* on them for daily cash flow.

The Form 990s for the six target incubators that were researched provided additional information on the financial organization. We were able to obtain revenue and expense information from each of the incubators which are compiled in the table below. The Form 990s confirmed conclusions that were drawn from the literature review about the breakdown of incubator funding.

Incubator	Revenue				Expenses	
	Program Service Revenue	Contributions and Grants	Investment Income	Other	Salaries, compensation, employee benefits	Other
ACEnet (2018)	Total: \$1,116,778				Total: \$518,076	
	\$580,093	\$536,685	\$0	\$0	\$601,399	\$518,076
CIFT (2018)	Total: \$2,919,129				Total: \$1,625,195	
	\$491,847	\$2,411,411	\$9,810	\$6,061	\$1,185,363	\$1,625,195
Grand Rapids D.M. (2018)	Total: \$514,165				Total: \$516,688	
	\$416,593	\$125,309	\$0	-\$27,737	\$0	\$516,688
The Hatchery (2018)	Total: \$758,809				Total: \$193,677	
	\$133,033	\$617,929	\$0	\$7,847	\$318,872	\$193,677
Hudson Valley ADC (2008)	Total: \$1,290,807				Total: \$801,260	
	\$935,281	\$352,326	\$0	\$3,200	\$489,547	\$801,260
Cleveland Kitchen (2018)	Total: \$162,281				Total: \$229,326	
	\$156,281	\$6,000	\$0	\$0	\$0	\$229,326

Table 2: Breakdown of the Form 990s of 6 successful food incubators

Fee Structures

While it is true that grants are responsible for a large portion of funding, it is not always necessary for the continued success of an incubator. As previously mentioned, successful incubators can be profitable solely due to successful fee structures. Cleveland Kitchen is a good example of this. They charge their producers both on which services they need, and how much of that service they need. For example, a producer is charged both for the service of storage, and the volume of storage needed. This way, larger producers with more capacity to pay, can generate more revenue for the incubator. The more storage they need or the larger they are, the more they are charged. This ensures that the incubator space is accessible to newer, smaller producers, but also that those who are active users are charged in proportion to their use, not their need. Each producer *needs* the space, but not all producers *use* the space equally. Thus, charging based on use is a preferred method over fixed-fee universal pricing.

The specific structures will be elaborated in the next sections, but as a general rule, the most successful incubators found a way to vary their prices according to the producers' needs. For example, Humkua, a food incubator in Hawaii, actively charged producers in a way that “reflect[ed] the users' effect on the kitchen” (Hollyer et al. 2000, 12). The pricing structure that accounts for the size of the producer helps to cultivate positive *customer relations*. Smaller producers, who need the help the most, are charged at a lower rate than larger producers. This increases the availability of the incubator to as many potential producers as possible. Tailoring the pricing to individuals (differential pricing) is conducive to both the success of the producer and the incubator because it allows for newer producers to use what they need, without paying as much money because they can benefit from more infrequent or smaller-scale use. This lowers a newer producer's start-up costs, lowers the risk, increases the desire to undertake new product development, which ultimately increases the market of producers that an incubator can serve. Accessibility to the commercial use kitchen for a producer opens up more potential sources of funding, which can decrease the need to rely on grants. Recognizing that each food producer occupies a different “consumer segment”, i.e., has different financial capabilities and risk appetite and connecting this to the “revenue model” requires incubators to structure a differentiated fee structure with an eye towards “use” in order to build a successful revenue model.

Contributions

The aspect of funding that has the most variety between our research and surveyed incubators was the amount that private donations contributed to the funding process. Some incubators operated with as little as 23% of their funding coming from “Contributions and Grants” while others operated with as much as 85% (Form 990 PDF). The wide variety does speak to the varying ways in which incubators can be successful. As discussed earlier, grants may depend on the priority of an incubator to grow, and/or the services it provides that add to its profits. Those that have a smaller percentage of grants as an inflow are using grants *incrementally* for expansive/start-up purposes. Of the incubators that have a large portion of grants, they tend to offer a wider range of services, outside the food sector, which allows them access to a larger supply of grants, and thus it is more feasible for their consistent use. For example, CIFT offers services ranging from a shared-use commercial kitchen to food safety consulting and recipe development, to manufacturing assistance for non-food-related services. This also highlights a relationship between the level of funding through grants and the kitchen incubator’s age. Newer incubators may need more grants to start up or expand their operations, while relatively older successful food incubators may not require grants (like Central Kitchen) because they generate a profit through a combination of rent for commercial kitchen space and other services such as storage and consultations.

There are multiple ways in which FoodSphere can encourage “contributions” from its members. Hollyer et al. reveals a few “active” ways include “membership” programs that solicit “community buy-in” as well as participation in local markets, to donations of needed equipment for storage or the marketplace (Hollyer et al. 2000, 4). These “active” manners of support are quite useful but restrict the volume of potential assistance to only those actively engaged with the incubator. FoodSphere would be able to solicit tax-deductible donations that don’t require an individual to be so active but would still allow their support. Even with this opportunity available, we advise sticking to the key revenue streams discussed in this section, as none of the incubators surveyed relied consistently on private contributions.

Because of the large variety of incubator structures, it is of paramount importance to ensure that many funding opportunities are available. In conclusion, the largest sources of funding for incubators are grants, fee for service, and grants. Correctly balancing these sources of funding in combination with efficient pricing systems will help any incubator reach success.

Interview Insights: Funding

Similarly, our findings from the interviews also suggest an age-specific relationship for an incubator's reliance on grants. Through our interview with Central Kitchen's (CK) CEO, we find that since it started up in 2013, CK operated as a for-profit and was breaking even. Until it gained its 501(c)3 status in 2019, the organization was funded by private investments from its members. After becoming a non-profit, the incubator received philanthropic donations and federal grants - \$500,000 in 2020. These grants were from the Gund Foundation, USDA, and PNC Bank - key resources that added to CK's funding stream (Ball 2019). According to our interviews, Central Kitchen seeks to sustain itself and generate additional revenue through other services like its accelerator. For its future operations, the CEO believes they do not need grant funding further and the kitchen will be able to make a profit. This ties into the literature, stating as kitchen incubators grow in size and expand their operations and services, they will be more able to sustain themselves without heavily relying on grants. Thus, establishing stable revenue streams is essential for developing the incubator. ACEnet operates similarly. It emphasizes the diversification of revenue streams to ensure sustainability. In particular reference to FoodSphere that will work with new and existing farmers from Local Roots, it must consider broadening the services it offers because farmers tend to have seasonal demand and may not join the incubator when their labor is needed on their farms. Designing, flexible training programs and consulting services will be key elements for success.

Additionally, Northwestern Ohio Cooperative Kitchen (NOCK) - CIFT's food incubator, by itself does not make a profit, instead depends on two other entities: CIFT and its manufacturing company, for financial sustainability. The revenue from fee-for-service does not cover the incubator's costs. Initially, it depended on grants when it was new to the market, but now it only requires small grants (\$25,000 - \$35,000) for specific equipment costs.

An exception to this is ACEnet. Despite establishing its incubator in 1990, it still relies heavily on grants. They have a designated grant writer who writes between 50 and 60 grants per year on average. Based on ACEnet's 990 form, the amount they receive from grants makes up about half of their total revenue, which is more than most of the other incubators. It relies primarily on USDA funding and relatively very little on donations. This signifies that the dependence on grants can also be a personal choice for food incubators. Central Kitchen wants to

move away from grants primarily because the process of applying for them is time intensive and also brings third-party interference into the business operations. The mission (and cultures) of these two organizations are different. ACEnet’s mission focuses more on “economic development” and having invested in a grant-writer, make it better organized to leverage government grants.

Fee

Underlying Research Questions: How are the fees and memberships connected with the programs (training) you offer? Are there unique ways in which you organize your incubatee process?

For this section, refer to Table 3 (Appendix A) for further information on the fee structures of Cleveland Central Kitchen, CIFT, and ACEnet.

Structure

The services and training an incubator provide are directly linked to its service interface and interaction with the food producers. The pricing of these varies according to the scale of the incubator and the type of service or training provided. The best conclusion to draw from this section is that the structure of the fees *must* be connected to the *producers* that are soliciting the service from the incubators. The director of programs at the very successful ACEnet incubator, advises as much: “Who you want to help should be how you structure your business” (ACEnet Interview). This supplements the varied fee structures mentioned in the previous sections. A “one-size-fits-all” approach is rarely is the best way of soliciting revenue from services while also maximizing access to the incubator itself. A rare example of this being done successfully comes from a small kitchen incubator in Hart Michigan called ‘Starting Block’ which was able to find success charging a universal rate for all of its members (Buckley, Peterson, and Bingen 2014). Simply stating that it was a universal rate is not the full story. In a way, this rate *was* determined by the producers around the incubator, just not on a *per capita* basis. Specifically, their fees for storage were determined by “ambient economic conditions” and “non-profit status

of surrounding kitchens” (Buckley, Peterson, and Bingen 2014, 170). This approach, although an uncommon one for structuring fees, proved successful for Starting Block.

Theory for Individualized Pricing

Allowing rates to be determined by use is much more common across the literature surveyed (Conover et al. 2015), (Addae-Wireko 2020), (Hall 2007), (Hollyer et al. 2000), (Dent 2008). The rates should be supportive. Recognizing that food producers are diverse, individual pricing opens up access to more producers, enlarging the market of potential customers. The benefit from per-person pricing comes from an economic principle called “income elasticity of demand.” The standard neoclassical model establishes that use, or demand, is inversely related to income. Demand is said to be “inelastic” when a change in price results in a relatively small change in quantity demanded. When dealing with customers that have come to “need” the kitchen services, the principle of price elasticity can help optimize the revenue from fees. For most new producers, their demand will be *very* income elastic - meaning that small fluctuations in price resulting from a higher fee-for-service will largely affect their demand for incubator services because they are starting-up and may have to give up opportunities that are relatively costly in proportion to their investments or profit they earn. New producers do not always turn a profit and have fewer funds to work with. They would be more price sensitive.

As producers grow with the kitchen incubator, and become more profitable, their price elasticity of demand becomes more *inelastic*. This is what allows for alternative pricing *per capita* to optimize revenue. As a user becomes more stable, they can afford an increased price. Because the customers for kitchen incubators are majority *need-based* customers (meaning those that could not operate in the market setting *without* the incubator), their ability to pay can be better catered to using differential, producer-supportive pricing. 501(c)3 incubators generally have *greater* flexibility for price setting as - unlike for-profit incubators - they can rely on grants and donations to cover costs and do not solely depend on fee-for-service as a means of funding. Moreover, producer-based pricing strategies can also increase the competitiveness of the kitchen incubator, drawing in larger numbers of small-scale food entrepreneurs. When it comes to setting fees for service, the most important aspect is to cater the prices to the customers that are the intended recipients of the service, while operating within the incubator’s financial constraints.

Commission

Two *key activities* that incubators used in combination with an individualized fee structure were commission and business training. A commission rate is the amount of the price of a good that is taken for the food incubator. Along with supplying necessary services to producers, a key element of an incubator is providing access to markets through networking. The ability to charge a commission is unique only to those incubators that assist their producers with access to markets. Ideally, this market is very close to the incubator space, or in the best-case scenario, in the same building, such as with Local Roots. The commission rates, like the fees for service, are also catered to the producers and the specific foods that the producers bring to the market. For example, Local Roots charges a lower commission rate on more perishable goods, while charging a higher rate for long-lasting products. A tiered pricing structure allows producers more freedom to operate, helping to prevent them from being priced out of the market.

Business Training

The last feature of this section will regard the business training provided by food incubators. The articles by Buckley, Peterson, and Bingen 2014, Conover et al. 2015, Palkova, and Horska 2018 discuss the absolute necessity of providing training. Most producers understand their product, but have trouble in attempting to comply with regulatory schemes, or figuring out the business aspect of their operations. As 40% of Local Roots' members are small-scale producers (revenue < \$10,000), it recognizes they require different support than larger businesses (Schuster 2020). Additionally, most incubators initially draw start-ups who need assistance in successfully operating a business. Therefore, through providing training - an aspect of the service interface, FoodSphere will maximize the implementation of its core mission - to support local farmers and food producers to find a market for value-added products. Training is essential in guiding new businesses towards a definitive, stable plan of action. Start-ups tend to fail because of poor decision-making resulting from a lack of business skills and market experience. Thus, having skilled staff with industry experience provide training to incubatees will increase their chances of success as they gain key insights and knowledge about the market. Moreover, FoodSphere can also develop specific tiered training programs for food producers based on their needs. For example, it will be beneficial to have a business plan development for incubatees who

newly joined the organization at a lower cost since they are in the start-up phase; more advanced training like how to network should potentially have a higher fee assuming the food producers who attend these may be in a more financially stable position. Thus, the price for training should also be charged according to a producer-oriented approach to make them accessible.

Similar successful kitchen incubators like Central Kitchen provide 5-week long online classes for \$450 that, during the initial weeks of training, teach about: 1) business plan development, 2) micro-lending and funding, 3) product development, 4) food safety and regulations. As the classes progress to the last few weeks, the incubator focuses on helping food producers with: 1) pricing and financials, 2) sales and marketing, 3) labeling and packaging. Thus, as we can see, there is a progressive pattern here. The training begins with assistance in starting up the business, finding relevant funding sources, and improving the product to be competitive in the market. The training then shifts to matters of pricing and growing customer base (as shown in Appendix C: Fig. 2).

If FoodSphere provides these training sessions individually (not as a collective package), it should focus on distributing pricing according to the financial ability of the producers. As noted earlier, those who have just joined the incubator may be discouraged by the high prices of initial training like business plan development and may not have the affordability. Instead, FoodSphere can cover the costs of training by charging relatively higher prices for training like marketing and packaging because, by this stage, the incubatees may be more financially stable. Moreover, online format of providing training is encouraged for kitchen incubators, especially during the pandemic, because these have low fixed costs of developing a website whereas for in-person training the incubator will have to assign a kitchen space, provide producers with equipment and materials which will drive up the cost and the training price. To provide low-cost, easily accessible training, online classes are highly recommended since many of the small-scale producers are also juggling multiple jobs, or work on farms and cannot generally take out time for in-person classes (Dent 2008, 507). This is a key consideration since Local Roots works with many farmers who are micro-producers generating revenues less than \$10,000 annually (Schuster 2020). Thus, through tiered, low-cost online business training, an incubator is also able to target a wider range of *customer segments* by increasing the accessibility of this service. Buckley et al. finds the least cost-intensive trainings are through a partner institution (Buckley, Peterson, and Bingen 2014, 171). FoodSphere has a unique opportunity in such a case. There are

three educational institutions: The College of Wooster, ATI, and Ohio State, all within proximity of FoodSphere at Local Roots. These entities can be leveraged to develop *partnership networks* that are crucial to the success and quality of services that an incubator can provide. Partnering with a university gives academic rigor to the training by assisting in planning the incubator's curricula and also would allow FoodSphere to work on different cost-sharing strategies with these institutions. The literature was not clear about the payment structure to the incubator for utilizing such resources, but the implication was such that these partners served as "members" who provided services as a buy-in to the community and potentially received a membership discount. This is in alignment with other membership programs unrelated to providing services but is wholly consistent with the notion of buy-in.

A secondary manner of providing business counseling to producers is through private class development. While more costly, it is very possible to operate successfully by developing classes through the parent organization. Central Kitchen fully maximized its use of classes and aims to be able to operate without grants while turning a profit (Cleveland Central Kitchen Interview, 29:05). A third and final way of providing services is through the staff or board members of the incubator or parent organization (Hollyer et al. 2000, 15). These positions either provide direct counseling or networking assistance that outsource the service. Providing new producers access to business counseling would assist the vitality and sustainability of their products, which in turn will help the overall integrity of an incubator. FoodSphere can assist producers by directly providing services that these new producers need. While the presence of a commercial kitchen is very important, providing training and counseling for producers is what distinguishes a sustainable food incubator from an unsustainable model.

Interview Insights: Fee

Our findings from interviewing successful kitchen incubators suggest a similar idea of producer-oriented pricing. What Central Kitchen, CIFT do is they provide hourly rates (CK: \$18/hr during peak hours and \$15/hr from 8 pm-6 am; CIFT: \$11/hr for the general kitchen use, \$21/hr for processing kitchen use). Therefore, both organizations do not impose a strict, large monthly fee on incubatees to access the commercial kitchen space. Although Central Kitchen does have a monthly membership rate (\$99/mo for unlimited kitchen access, clients have to pay separately for storage), it offers alternative fee structures like the hourly fee mentioned above.

This increases the accessibility of food producers from all backgrounds because they can pay specifically for how much they use the services and kitchen space of the incubator. This is a beneficial technique for FoodSphere and may attract a larger base of incubatees because Local Roots clients (whom the incubator will also serve) are small-scale producers who may be working more than one job, and farmers who may not have time regularly to come to the incubator.

Moreover, both ACEnet and Central Kitchen provide online training programs to capture a wider audience and maintain accessibility. Among these training sessions, they assist clients in figuring out food industry-related laws and regulations such as assisting them with licensing and food safety training. It is also common for the incubator to refer incubatees to third-party organizations that can guide them through acquiring all the required licenses. CIFT is an example of this, relying on external auditing sources that work with the producers to ensure each one is aware of their specific, individualized legal requirements and processes.

Central Kitchen's CEO reports providing business training sessions is costly but has the potential to generate large amounts of revenue for incubators (Cleveland Central Kitchen Interview, 28:04). This, again, is in line with the literature that states conducting business training sessions is critical to the success of a kitchen incubator. Apart from generating revenue, training incubatees increases their chances of growth and sustaining their businesses even after they move away from the incubator. Thus, the success of the clients leads to the success of the incubator, increasing its competitiveness, allowing the organization to learn from and update its key activities, as well as build stronger relationships with its customers. A kitchen incubator has a huge long-term benefit from maintaining a lasting bond with its incubatees. If the clients go on to be prosperous business owners, the incubator can create partnerships with them to further invest in and expand the incubator through their financial resources, expertise, and other key resources that they may have to offer (connections, access to market, etc.).

All of the kitchen incubators we conversed with reported they do not make a profit from its revenue stream. Central Kitchen's CEO explicitly shared that incubator models are very hard to make money out of. They instead depend on diversified services and separate entities within the overall organization (of which a kitchen incubator is just one part) to earn a surplus. Examples of this are ACEnet's wood sector, Central Kitchen's accelerator (whose clients are its developed incubatees), and CIFT's manufacturing department.

Structure

***Underlying Research Question:** Compare the board structure to bring out unique ways in which they meet their mission, leverage firm specific and community assets and capabilities, and have had financial success.*

Board Members

The structure of a kitchen incubator in terms of management is equally important to the organization's success as its services and revenue. Board members, staff, and volunteers are its strategic assets. For any of the organizations surveyed, there were anywhere from 6-15 members on a board. The number of board members, quite intuitively, was related to the size of the business and what services they provided. Most of the board members are well-connected with a particular community and provide some form of assistance to the incubator through their personal areas of expertise.

Aside from strategic and catered assistance and the potential to provide services themselves, a central function of a board is providing networking opportunities. Networking opportunities are one of the business model's value propositions. As gathered from our kitchen incubator interviewees, they had members on their boards from banks, grocery stores, law firms, etc., all who lent specific benefits to producers. Bankers on the board allow incubators to connect food producers with loans to expand their businesses; retailers as incubator board members can provide greater market access and reduced-fee shelf-space to incubatees; lawyers on the board assist producers in complying with relevant laws and regulations. Each of these members provided a specific asset, either directly or through contacts, to the producers the incubator served. In addition to providing services and networking opportunities, board members should also be "broadly representative" of the surrounding area (Buckley, Peterson, and Bingen 2014, 166). This further supports our contention that board members serve to assist with networking for the incubators. Having a board that brings together the unique assets of a community opens up incubators to a great number of resources within the local area that the producers would struggle to access on their own. Thus, all these facets of board members - acting as a liaison between community assets and producers, providing networking opportunities, and at times conducting training for food producers--all contribute to the quality and ability of the incubator to support start-ups.

Interview Analysis: Board Members

Interviews with successful kitchen incubators also suggest that members of the board should add to the business, acting as a value proposition. All of the organizations we interviewed had some board members from the food industry - for example, they either worked at local or had their own restaurants. This is beneficial because they will have related experience for effectively strategizing for the kitchen incubator. Additionally, the board also can have an array of individuals from different backgrounds, as long as they increase the value of the incubator. Central Kitchen has a board member from Heinen's, and the two entities also are collaborators. This is advantageous because this relationship with the supermarket chain can work to increase incubatees' access to the market. Thus, Heinen's not only acts as a key resource and partner to Central Kitchen, but it also adds value to the incubator by furthering its networking.

Board members, although usually, they tend to have a more hands-off approach, can also assist in providing business training to the producers when needed - as CIFT reports. The expertise of board members within the food industry, and beyond it (such as lawyers for understanding necessary laws and regulations, bankers for managing finances and exploring funding sources, grocery store owners for gaining access to the market, etc.) all can be utilized to train incubatees on how to run successful businesses.

Staff

The incubators' staff are another important but widely varying component of the organizations' operation. Some of our interviewees reported having 1-2 employees, while others had many more. This, again, depends on the operational size of the kitchen incubator and the services provided. However, our findings suggest a skilled operations and/or kitchen manager who has a background in the food industry as a staff member so they can directly work with the producers on-site, help with planning and scheduling, and provide other necessary guidance is of utmost importance. This staff position will ultimately affect the day-to-day operations of the incubator and be a primary asset for the organization. Central Kitchen, for example, has an on-

site ‘kitchen manager’ that helps provide business counseling, assistance for regulatory compliance, and kitchen maintenance.

The dynamic between the board members and the staff is a key component of the structure. Aside from networking or directly providing services, board members are charged with direction. They determine the incubator’s mission and values and ultimately decide on who will be a part of the staff. This mission is enforced and outlined through the use of bylaws. These are legally binding notions that are usually written up by an attorney to provide a mechanism of enforcement and accountability for the use of the institution in question.

Using an analogy given by a board member from Local Roots during this project, the board of directors serves as the “passengers” providing navigation in a car and the “staff” are the ones that drive. The interplay between the board members' direction and the staff's execution is a fundamental relationship that must be efficient. There was no discernible “ideal” structure from the literature, which is good in that it leaves room for flexibility based on preferences. Of all the direction and specific advice in this plan, this is an aspect that FoodSphere itself retains a high degree of choice. FoodSphere should feel free to select its members and allow chains of commands to form naturally or may systematically enforce them, so long as they maintain efficient interplay between those navigating and those driving.

Interview Analysis: Staff

The kitchen incubator’s staff acts as key resources. Over-time, employees also have the potential to add to the value proposition by becoming unique assets as they grow experienced in running the incubator and handling the incubatees. From our interviews, the most significant staff position is a ‘Kitchen and Operations Manager’ who is essential for effectively communicating with potential clients, understanding their product and, determining if the commercial kitchen has the resources and capacity to support its production. Moreover, this individual should also have a background in the food industry and should have in-depth knowledge about compliance in the food industry, regulations, and licensing, thus proving helpful in assisting both the incubator and incubatees. It can also be beneficial to have an employee in charge of the education and client outreach services to develop a curriculum and keep it up to date. Central Kitchen offers structured classes for guiding food producers on how to

successfully start up their own businesses. Thus, having a well-planned, carefully thought-out curriculum to follow for these classes is of utmost importance in productively relaying knowledge and advice to incubatees.

Moreover, some food incubators run with only a few employees. For example, CIFT has 2 primary employees that handle their incubator kitchen, one of which is an operations manager. Thus, the incubator can operate with a small number of employees, however, this may be burdening on them. CIFT has so far had success despite its limited staff, but upon interviewing them we found the employees were spread thin over their three fully booked commercial kitchens. Therefore, a food incubator can reduce the cost of salaries by hiring few workers, but this will only be successful if the employees are fully committed to taking up the extra pressure and work. The extent of the workforce also depends on the demand of the incubator. We suggest the number of employees grow based on need as the demand for services of the incubator rises, to avoid both overstaffing and understaffing.

Key Partners

Lastly, but of utmost importance, are the partners of a kitchen incubator. These, again, are crucial to establishing networking opportunities for the food producers, but also benefit the incubator. Partnerships are usually other businesses within the community that help to provide services to the incubator. *Key partners* could be smaller businesses, or they could be established corporations with expansive reach. The purpose of the incubator developing relationships with partners is to increase potential growth opportunities for both the clients and the incubator.

We suggest some required partners for a kitchen incubator that can assist in its operations and networking such as banks, lawyers, and retailers. Other partners can be added based on the mission of the business, creating unique/individualized relationships while centering the focus of this partnership on increasing benefit to both the incubator and incubatees. FoodSphere can also formulate partnerships with the local businesses to further the economic growth within Wooster and across Wayne County and in the process strengthening community engagement with the incubator.

Interview Analysis: Key Partners

For example, ACEnet reports partnering with Cornell University “for more advanced food science expertise” to develop small-scale homemade products into FDA-approved production processes (ACEnet Interview, 03:30). Similarly, Central Kitchen worked with retailers like Heinen’s to host ‘pitch days’ where producers were connected with grocers to expand the market of their products. Moreover, it also partnered with the Economic and Community Development Institute (ECDI) to develop a curriculum for the incubator classes. Another key partner for Central Kitchen is the Oberlin Food Hub, a distribution service, to source ingredients for the incubatees. Partnering with banks assists the incubator in determining the financial needs of the incubatees and also opens up possible funding options for the food producers to expand. Thus, partners provide an advantage to both the kitchen incubator and producers in numerous ways, which can vary uniquely depending on the partnerships formed.

Key Insights from Research

Over the last 4 months, the Local Social Entrepreneurship Team investigated the business model ingredients that contribute to the success of existing food incubators in order to provide recommendations for their development of FoodSphere. This document provides a detailed look into our findings. Based on all of our research from the past four months, our team has four key recommendations for FoodSphere:

1. Connect fully with incubatees

The first key insight is the success of any food incubator is closely tied to the success of its incubatees. This requires the incubator to be fully connected with its food producers, completely aware of their needs and goals, as well as provide targeted resources that also encourage them to expand. Our second insight from the research draws on this point.

2. Provide business training

For an incubator to understand its producers, we suggest a second key insight: provide business training. We encourage FoodSphere to employ tiered, progressive training approaches for the incubatees for their smooth and continued growth. These training should ideally be low-cost, fully inclusive, and accessible programs that incubatees from all backgrounds can participate in. As each producer goes through the training process, the incubator will be able to better understand their needs and update the program/curricula, allowing for more tailored services to be offered that increase the chances of success for a start-up and also encourages them to grow as a business. Across all of the literature and interviews, some level of business training was implemented. There are examples where the business training drove revenue growth (Central Kitchen), and others where a partnership with a parent institution allowed for these services to be provided as part of a “buy-in” effort by that institution (Starting Block). The primary service that FoodSphere can provide to serve the producers is business training. Whether it is partnering with The College of Wooster or OSU, purchasing training packages, or providing capable individuals to service the individual, FoodSphere could make the biggest difference within the business side of the incubation process.

3. Vetting process for incubatees

The third insight is to have some kind of sorting process based on the specific needs of the producers that you intend to service. This characteristic was used in *all* of the studies we reviewed, as well as confirmed by another independent survey of food incubators (Conover et al. 2015). The success of an incubator is inextricably tied to the success of its producers, which makes it key to first understand the drive of possible clients to ensure the best outcomes for both them and the incubator. The same logic will apply to FoodSphere's operational success. It has the potential to partner with Local Roots, which has already found success between its market and shared-use commercial kitchen. Local Roots is a prime example of a commercial kitchen that is committed to sustainability, focused on serving its producers, and ultimately cultivating underserved producers within the Wooster community. Its success and determination would make it an ideal partner for FoodSphere, and it already has managed to solicit valuable producers who are committed to growth and sustainability. Thus, through recruiting incubatees from Local Roots, FoodSphere may already have a sense of the dedication of the food producer.

4. Plan for a self-sustainable food incubator

The fourth and final insight is that FoodSphere should ensure they develop a workable financial model. In the 'funding' section of this document, we reported that the most successful food incubators rely less on grants as they grow. This indicates that the incubator is moving towards self-sustainability and generating revenue to at least break even through its operations. By lower dependence on grants, the food incubator also reduces elements of uncertainty and reduces third-party interference within the organization. We advise FoodSphere to prioritize a sustainable model from the start and gradually work towards it. It is crucial for any incubator to find a model that allows them to function, without continually relying on large sums of money and hiring a costly grant writer. We examined pricing per capita as a way to maximize business revenue and alternatively illuminated the kinds of services producers need from incubators. A common method to increase revenue through fee for service and move away from grants is to offer a diverse range of services such as a ghost kitchen - renting the commercial kitchen to a client to prepare food and send it out through delivery services like UberEats or DoorDash,

cutting the producer's cost of owning a restaurant to cook, co-manufacturing, etc., as we have found through our conversations with ACEnet, CIFT, and Central Kitchen.

Suggestions:

- Partner with an organization. The College of Wooster or Ohio State University provides great opportunities to give FoodSphere access to qualified individuals that can help counsel potential producers on how entrepreneurship works and how to operate in the market, as well as set up incubator curricula.
- Assist with regulatory schemes. Local Roots already helps with this, but as a Parent Organization, it is necessary to further develop the business's capacity to train producers on how to get licensed and comply with federal and state legislation.
- Develop a 'vetting process' that ensures that incubators take on procedures whose social assets can be viably maximized.

Conclusion

FoodSphere is an entrepreneurial center for Local Roots. It aims to foster economic growth and sustainability by assisting local farmers and producers of value-added agriculture products in starting up their own businesses. FoodSphere will do so by organizing as a food incubator where it will combine dynamic aspects like services (business training), diversely skilled board members, well-equipped staff, and unique beneficial partnerships to prepare food producers (clients) for successfully expanding and running their own ventures.

The Local Social Entrepreneurship team, after looking through a range of relevant literature sources, interviewing three well-established kitchen incubators, and analyzing their form 990s' provide the following key insights:

1. The success of the incubator is ultimately tied to the success of the incubatees. For this reason, FoodSphere must work closely with its clients and fully understand their needs.
2. It is essential to provide focused business training to encourage the producers to grow and learn from expert knowledge and advice. A tiered, low-cost training model would be ideal that is accessible to all clients regardless of their background. It is also possible to progressively increase the fee for training as each element of it specifically caters to the next stage of an incubatee's development with FoodSphere (refer to Appendix C: Fig. 2). We also encourage FoodSphere to partner with The College of Wooster, Ohio State University to come up with a curriculum for the incubator classes to provide up-to-date training.
3. Impose a vetting/screening process to filter out the more committed incubatee applicants from those who are less motivated through interviews, asking for a completed business plan, etc. Because the mission of FoodSphere is to help the local farmers and food producers, the vetting process does not need to be used as an elimination method, rather it can also assist the incubator in better serving the needs of the clients by first fully understanding their ideas and the resources they require.
4. FoodSphere should, from its starting stage, focus on ways to develop a self-sustainable food incubator. Reliance on grants is an age-specific relationship. As incubators grow,

they tend to move away from grants and instead, diversify their services to lower risk and generate revenue through several methods.

We are hopeful these insights will be beneficial in the development of FoodSphere. It is important to acknowledge this food incubator has the potential to be a dynamic tool that could maximize social assets that are left untapped by the local market. The agribusiness sector has high start-up costs and helping small-scale producers mitigate those opens up the surrounding communities to high-quality products that were previously hindered from accessing the market. Thus, FoodSphere can both help local farmers and food producers, while also promoting economic growth and job creations within Wooster and its surrounding areas.

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Appendix A. Descriptions of case studies interviewed

Kitchen Incubator	Services	Trainings
Cleveland Central Kitchen	3600 sq. ft. commercial kitchen <ul style="list-style-type: none"> - Peak hours: \$18/hr - 8pm - 6am: \$15/hr - Monthly membership: \$99/mo, unlimited hours - Rent of large equipment: \$5/hr - Dry storage: \$20/mo/shelf - Freezer storage: \$30/mo/shelf One-on-one consulting package: \$300/mo for 10 hrs	Craft Food Classroom: 5 weeks online for \$450 or 7 weeks in person (postponed because of COVID). It offers: <ul style="list-style-type: none"> - business plan development - micro-lending and funding - product development - food safety and regulations - pricing and financials - sales and marketing - labelling and packaging
ACEnet	Tabletop: \$10/hr (no equipment) Dry storage: \$25/mo/pallet Freezer storage: \$70/mo/pallet	<ul style="list-style-type: none"> - Food Science & Product Development <ul style="list-style-type: none"> - Product and recipe development: \$25/product - Product design - Sector specific trainings - Business & Financial planning assistance - Marketing services
CIFT (NOCK)	<ul style="list-style-type: none"> - General Kitchen use: \$11/hr - Processing Kitchen use: \$21/hr - Catering: \$100/mo - Dry storage: \$10/mo/shelf - Freezer: \$10/mo/shelf - Warehouse Storage: \$20/mo/pallet 	Assistance for food entrepreneurs in the initial stages of development <ul style="list-style-type: none"> - Business plan guide - Start-up guide through onboarding process Small Business Development Services: <ul style="list-style-type: none"> - Food Safety Trainings - Paid templates for proper production documentation - Information on packaging, marketing etc. Nutritional information for a fee

Table 3: Services and training provided by Cleveland Central Kitchen, ACEnet, and CIFT.

Appendix B. General Incubator Structure

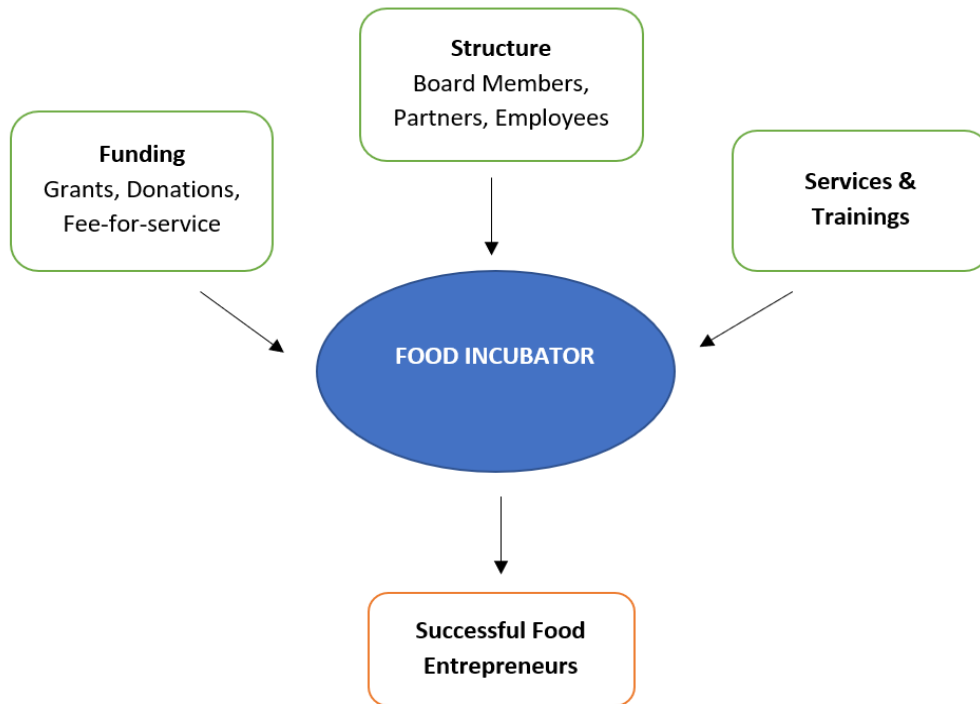


Fig. 1: General organization of a successful kitchen incubator

Appendix C. Tiered Business Training



Fig. 2: A tiered, progressive structure for business training followed by Central Kitchen