A marketing ecosystem promoting prosperity for small, local farmers by revolutionizing logistics, purchasing power, safety, and what consumers know about their food.

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Executive Summary

The Local Beat is a consulting group that uses software-based interfaces to find data-driven recommendations, market outlets and marketing solutions for small scale farmers .The Local Beat recognizes that consuming local is not a fad. The US food system is shifting towards local production[6]. We find unique market based solutions for the local farmers, local chefs and consumers that are driving this transition. Rather than scaling production by consolidating farming production, our data driven recommended, market solutions look to scale by consolidating the market place and expanding the number of small producers on the landscape. We look forward to increasing the amount of locally grown food in our restaurants and institutions through the RED foods interface, to evolving what consumers buy at the farmers' market through our Market Basket system, and to increase profitability and market access of local grass-fed beef producers though the Local Beat's Local Meat Market.

Problem Statement

In the 2016 Minnesota Sustainable Farmers Association's farmer survey, the number one comment was that "I love the production side of farming, but I'm introverted/shy/just plain not good at direct marketing. How can I still be successful?" At the same time, the USDA explains that 54% of farmers have a negative farm income and 19% of farmers will go out of business this year. Producing high quality and consistent produce is hard enough for farms, yet small farmers are also forced to spend valuable time seeking avenues for market access[1]. Consumers are driving the trends to eat local[2], yet excess local produce is left to rot in the field, Chefs lack convenient access reliable local produce, and we all are thinking "Its says local and sustainable but what that mean?,"

The Local Food System has pains throughout the system. Within the Local Food System, we see the following problems highlighted in Table 1,

Producers	Retailers	Consumers
- Too Small To Access Markets - Lack Access to Multiple Market Outlets - High Transportation Costs[3] - Bio-Security and Tracking - Multiple Listing Locations	- Buying Local Products Individually Over Text or Email - Lack of Transparency in Marketing - Bio-Security and Tracking	- What Does Local Mean? - Local Market is driven by Feelings and Fads - Where Else Can I Buy This Product?

Table 1.

[1] United States Department of Agriculture's 2012 Farm Census

[2] "*The Rising Importance of Locally Grown Food in the US Food System: A National Perspective*." USDA. (2014).

[3] "Transport Costs and Rural Development." Kilkenny et al. (1998)

Producers, Retailers, and Consumers need an ecosystem that allows for aggregation of produce as well as transportation equipped with a straightforward tracking system, so local farmers can sell into the Twin Cities' expanding local food market. This also keeps the identity of the farmers connected to their food, so retailers and consumers can buy knowing their getting safe, local food.

Solution Description

The Local Beat consults with local growers to find data-driven recommendations, market outlets, and marketing solutions for small scale farmers through.The Local Beat finds market-based solutions for farmers by intimately understanding their specific products, pains, and gain creators in order to create unique pain relievers and gains. Rather than scaling produce production by consolidating farming production, our data driven recommended market solutions look to scale by consolidating the market place and expanding the number of small producers on the landscape.

The Local Beat has recently paired with Restaurants Eat Direct (RED) Food, which offers RED Market, a technology that recreates the farm to table value chain through a simple proprietary online order and product reporting system. This system streamlines local food transactions and maximizes restaurant local food sourcing capabilities. Farmers list products to RED's online produce list and restaurants purchase produce from multiple farms in a single RED Market transaction. RED furthers these relationships by reporting farm-to-kitchen produce data which increases and stabilizes the number of sourcing relationships. The transaction-based revenue model ensures predictable revenue, minimizing the financial and logistical risk of local food sourcing. RED software is scalable and applicable to diverse markets due to the national demand and global possibility of local food. RED foods place second at the Minnesota Cup in 2015.

The Market Place

Stephanie Shimp, who co-owns nearly 15 restaurants through The Twin-Cities Restaurant conglomerate Blue Plate Company, told The Local Beat that Twin-Cities Restaurants want stable, predictable and affordable access to local sustainable products[4]. Lillie O'Neal of Parasole explained that preserving the planet and community through local food sourcing is a key marketing factor for restaurants[5]. Senior VP Hudson Riehle of the National Restaurant Association has explained that local food has become more than a trend and has developed into a shift of culture over time[6]. This cultural shift is deeply apparent in Minnesota.

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[4] Stephanie Shimp, Blue Plate Co., Personal Interview by Katie Myhre, (2015).
[5] Lillie O'Neal, Parasole, Phone Interview by Katie Myhre, (2015).
[6] "*The Rising Importance of Locally Grown Food in the US Food System: A National Perspective*." USDA. (2014).

To meet current demands, the number of Minnesota sustainable farmers have increased 5-fold in the last 5 years[7]. These farmers only serve around 20 of the Twin-Cities 1,829 restaurants[8], which collectively each year purchase around $851 million worth of food[9]. Nationally, only 14% of every dollar spent on food makes it back to the farmer. The other 86% is spent on marketing, transportation, and logistics[10]. In a recent study performed by RED Foods, 130 local sustainable farmers near the Twin Cities were asked about the current local farming environment in Minnesota.. Nearly 75% of farmers have a desire to share transportation costs among nearby farmers. A Majority of these farmers indicated interest in a rideshare type delivery system. In addition, 70% of farmers indicated a preference of using an online marketplace to sell their products rather than using their current Community Supported Agriculture or Farmers' Market models.

Innovation in the Market Place

Market Access

The Local Beat makes it possible for Farmers are able to access markets previously unavailable by consolidating produce among a network of farmers to fill orders. Small farmers are able to interact with retail outlets previously out of reach. Excess produce leftover from other farmers' markets and CSAs can also be sold in~~to~~ a digital wholesale marketplace. Excess produce from other market outlets can be sold in aggregation with produce from farmers that are too small too enter any market outlets to fill orders. The Local Beat's market access scales through aggregation to impact small, local farmers at any scale.

Invoices and Payment

A digital marketplace also innovates the way chefs and other retailers manage their local produce. Chefs buying local write many checks for individual farmer invoices—a large barrier for getting new chefs to buy local. One check to a distributor like Sysco once a week is easier. Chefs write The Local Beat one check, and we distribute payments to the individual farmers. Reaching chefs with better purchasing systems allows farmers access to a $2 billion local restaurant industry. By adding simplicity to buying local, we again opens market outlets for more small farmers.

The Logistics of Bio-Security

Through a scannable, check-in system, it is possible know where everything is and from where it has come. Bio-security and tracking helps small farmers access institutions like farm-to-school. The real-time checking in also innovates our consumer marketing arm. The lack of biosecurity and tracking is a major hindrance for large institutions, like schools

[7] Dan McElroy, Personal Interview by Katie Myhre, (2015).
[8] Minnesota Department of Revenue (2013).
[9] Jodi Ayers, Personal Interview by Katie Myhre, (2015).
[10] Tracie McMillan, CNN News. 2012

and hospitals, as well as restaurants to buy from local producers[11]. Current programs at institutions that use locally sourced food, like Minneapolis Public Schools' Farm-to-School Program, still use large distributors as a tracker of bio-security[12]. Although this is a move in the right direction, a large portion of revenues are still retained by the distributer, which reduces the economic impacts of these programs.

Customer Retention

We understand that we also must work to grow the consumer base that is dedicated to eating local food. Consumer retention and development is driven by four activities: (1) a consistent publishing of videos of 'stories that are told by farmers' rather than 'farmer stories' in aims to connect consumers with farmers on a personal level rather than on a who's-producing-my-food-level through social media outlets, (2) use the consumer App to direct consumers to member restaurants, produce of featured farmers, or other places to consume produce from a meal they enjoyed, (3) a consumer App that is used as a 'lens of the consumer's perception', which will connect consumers to their food and food producers, and (4) using social media outlets, which directs consumers through the App, as a form of guerilla marketing for the restaurants and producers.

Recently, we completed a proof of concept testing at the Red Wagon Pizza Restaurant. For one weekend, owner Peter Campbell ran two different 'Featured Items' menu drop cards. Both drop cards featured the same meals but were promoted in different ways. One card simply listed meal ingredients like a tradition menu would. The second cards promoted the farmers that produced the key ingredient in each dish. We Included a picture of the farmers and a quick story about the farm itself of how they met Peter. The tables that had the farmers-based, four item drop cards saw a 17% to 32% increase in sale over the item-based drop cards. This shows the marketing power of connecting food items to their farmers at the the restaurant.

Competition

Corporate distributors like BIX Food and SYSCO meet an estimated 95% of the Twin-Cities restaurant sourcing needs. These distributors are the primary competition because they predictably and reliably supply produce to restaurants in one affordable electronic transaction. BIX Foods is one of the only such producers that are supplying a limited amount of local food. A BIX Sales Representative claimed that Bix would not adopt many of the smaller scale farms because their business model, like more corporate distribution systems, prioritizes few larger farms over multiple, diverse operations.

Many companies are trying to address the farm to fork gap using online databases, distribution or transaction systems[13]. Provender, Local Orbit, Local Harvest, Local Dirt, and

[11] Anonymous Farmer's Market Manager. Personal Interview, 2016
[12] Kate Seybold, Minneapolis Public Schools' Farm-to-SChool Program Assistant
[13] Stephanie Storm. "*Start-Ups Rise to Close a Gap for Farmers." CIAS. 2015*

Farmplicity are online local food marketplaces similar to the RED market mentioned above. However, these models do not effectively address farmer individuality and autonomy, restaurant-producer demands and customer marketing.

Social Impacts

Our data driven market helps small farmers on the landscape make a livable wage. We decrease market access barriers for existing and new small farmers. Studies have also shown that small farmers are more likely to adhere to stricter water quality and chemical use standards. Being a scalable digital marketplace, we are able to scale our social and environmental impacts through small farmers.

Our marketing aims to change the local food conversation. With a large consumer base and an open forum for food information, we make sure retailers can only market themselves as being 'local' when they are connected to local farmers. No more local food without local farmers. We are also able to change the social environment between farmers and consumer. There is currently a narrow and stale narrative of the local farmer—a small farmer that works hard because they love their produce and their land. We will step out of the stale farmer story and tell great, connectable stories told by farmers.

Future Plans / Venture Pilot Plan

RED Market

This summer we are working to pair with five well know chefs, who are committed to local food procurement, and five highly respected local farmers already selling to restaurants. Through these partnership we see two opportunities: (1) we are able to work intimately with all of the actors to make sure RED's interface is user-friendly and efficient as possible, and (2) we are able to develop our ability to expand and scale with buy-in from well respected chefs and farmers in the local food system. This season we are working to see the in-season pains of farmers and chefs, and working with them to solve them by evolving the RED interface. We are looking into modifying our pricing structure to reflect the time they are spending consulting with us through the season.

Market Baskets

This Farmer's Market season, we are excited develop our Market Basket sales. This market outlet will expand our market solutions for small farmers. At the end of each week, small farmers are left with excess produce that they cannot sell. Through the week we will communicate with farmers in the network to get relative but accurate counts and types of excess produce. We will then aggregate the counts to develop an idea of the total amount of produce entering the Market Basket system. Early in the week, individual customers will buy a market basket online. For $40, each customer will receive 20 virtual

tokens. With those tokens they can buy from the produce we have entered into the interface. This market runs off the principles of supply and demand. In a week that has a lot of excess lettuce into the market, lettuce may only be one token. The next week it might be four tokens. Baskets will be pre boxed and ready for pick-up at Linden Hills and Tiny Diner Farmers' Markets. In weeks with low excess produce, boxes will be supplemented with produce bought through the venders and the respective farmers' markets.

We aim for the Market Basket to be a middle ground between farmer's markets and community supported agriculture (CSA) shares. By buying in weekly rather than seasonally, we are offering consumers more freedom. In addition, consumers have an ability to pick what is going into their Market Box, which proves to be an improvement upon the CSA model for some consumers. With a CSA share ranging from about $20-$35, a price point at $40 a week is a reasonable increase with the added convenience and freedoms. In addition, the only marginal costs of expansion would be the costs of boxes of bags associated with the Market Baskets themselves. Since the marketplace is digital and we a utilizing farmers' market resources already available to us, we will start with a small pilot and scale if there is market interest. Further budgeting can be found in Appendix B.

There are two main risks within the Market Basket system: (1) poor quality of produce and (2) poor produce volume. Because we are working with excess produce and in a week-to-week buying system, we are noticeably sensitive to these risks. To insure a high quality of produce in every basket, the employee responsible for packing Market Baskets will be responsible for spot checking quality. In advent of a poor volume week, we will supplement Market Boxes with produce bought from Farmers' Market vendors. Although this will reduce the week's margins, it will ensure that customers will continue purchasing in subsequent weeks.

The Local Meat Market

Small grass-fed beef producers work on some of the slimmest margins in agriculture. After raising a steer or heifer for 24-30 months, they often only expect to receive a $400 net gain[14]. Producers in Crow Wing and Cass Counties in Minnesota explain all cuts other than prime steak cuts are ground into hamburger due to lack of markets. By helping these farmers sell 'less desirable cuts' like roasts and briskets, we can increase net gains for farmers by $1000 per animal.

Consumer Surveys conducted through the Brainerd Area Lake Associations show that 72% of consumers would be interested in buying grass-fed beef directly from farmers in

[14] Crow Wing and Cass Counties Farm Bureau Members, Personal Interview, 2017

the area[15]. In addition, we are confent that we can sell not only steaks and ground beef but roasts, briskets, ribs and even soup bones.

The Local Meat Market will allow farmers to post the final cuts of their animal on the interface. Since the farm will not bring the animal to slaughter until it is completely sold, the meats will be sold in an all or nothing model, much like other crowdsourcing interfaces. As the time window on the purchase closes, this also drives consumers to by the last few cuts of beef. At the completion of the sale, the transactions will be finalized and invoice will be available for the farmer and the consumers. Items will then be available for pick-up at the farm or drop-off at designated locations throughout the community. We would charge a services fee of 7% of the transaction, much like in the RED model.

The largest risk in this system is driving consistent consumer purchasing. SInce many Lake Association members in the Brainerd area use their homes on the weekends or for vacations, the consistency of purchase is currently unclear.

Purpose of Funds

Item	Use/Reasoning	Itemized	Cost
Website and interface Development	We aim to produce a low cost site for the Market Basket Pilot. The site will be used as the interface for Market Basket sales and 'item purchasing' through the token system	$30/hr 20 hrs	$600
	We aim to develop a higher functioning site for the Local Beat's Local Meat Market. With more consumer research we are more confident in producing a high quality site.	$75/hr 30 hrs	$2,250
Misc. Costs Associated with the Market Basket Pilot	These costs would include purchasing of the cloth bags used for consumer's purchases, signage for the market and marketing		$980
Total			$3,830

[15] CURA Grass-fed Beef Consumers Survey, 2017

Appendix A- RED Foods 3-year Plan

	First Year	Second Year	Third Year
Farmer Financial Output			
Total Target Number of Farmers	55	95	120
Vegetable Farmers	40	65	70
Livestock Farmers	15	30	40
Organic Farmers	0	0	10
Est. Total Produce Sales via RED	$834,000	$2,238,240	$3,637,240
Est. Total Livestock Sales via RED	$395,010	$1,119,120	$1,958,460
Est. Total Organic Sales via RED	-	-	$559,560
Est. Total Aggregated Sales via RED	$1,259,010	$3,357,360	$6,155,160
Subtotal of Farmer Financial Output	$1,259,010	$3,357,360	$6,155,160
Restaurant Financial Output			
Target Number of Restaurants	18	40	60
Target ave. annual Restaurant Local Food Expense	$69,945	$83,934	$102,586
Target ave. Annual Restaurant Local Produce Expense	$48,000	$55,956	$60,619
Percent Annual Produce Sourcing	10.3%	12%	13%
Target ave. Annual Restaurant Local Meat Expense	$21,945	$27,978	$32,641
Percent Annual Meat Sourcing	4.7%	6%	7%
Target ave. Annual Restaurant Local Organic Expense	-	-	-

Percent Annual Organic Sourcing	0%	0%	0%
Target Total Local Produce Expense	$864,000	$2,238,240	$3,637,140
Target Total Local Meat Expense	$395,010	$1,119,120	$1,958.460
Target Total Local Organic Expense	-	-	-
Aggregated ave. Total Restaurant Local Food Expenses via RED	$1,259,010	$3,357,360	$6,155,160
Subtotal Restaurant Financial Output	$1,259,010	$3,357,360	$6,155,160
R.E.D FOOD General			
Total Aggregated gross Sales via RED	$1,259,010	$3,357,360	$6,155,160
Expenses	$1,190,399	$3,154,150	$5756,092
Transaction Completion	$1,120,519	$3,154,150	$5,756,092
Technology Fees	$600	$26,400	$76,800
Marketing	$6,780	$8,900	$46,800
Other	$62,500	$130,800	$154,400
RED Revenue	$68,611	$203,210	$399,068
Net R.E.D. FOOD Profit	$48,028	$142,247	$279,347

Appendix B- Market Basket 3-year Plan

	First Year	Second Year	Third Year
Consumer Financial Output			
Est. Total Basket Sold Weekly	25	100	500
Number of Participating Farmers' Markets	1	2	5
Cost per Market Basket	$40	$40	$40
Est. Market Basket Sales Weekly	$1000	$4000	$20,000
Est. Annual Market Basket Sales (20 Week Season	$20,000	$80,000	$400,000
Subtotal of Farmer Financial Output	$20,000	$80,000	$400,000
Produce Purchasing Expenses			
Est. Total Basket Sold Weekly	25	100	500
Cost per Market Basket	$35	$35	$35
Est. Market Basket Cost Weekly	$875	$3,500	$17,500
Est. Annual Market Basket Sales (20 Week Season	$17,500	$70,000	$350,000
Subtotal Produce Purchasing Expenses	$17,500	$70,000	$350,000
R.E.D FOOD General			
Total Gross Consumer Sales	$20,000	$80,000	$400,000
Expenses	$19,080	$75,700	$359,200
Produce Purchasing	$17,500	$70,000	$350,000
Technology Fees	$600	$2000	$3000

Marketing	$780	$1,900	$2,800
Other	$200	$1,800	$3,400
Net Market Basket Profit	$920	$4,300	$40,800