Improving the Online Experience for Local Organic Farmers and Buyers

Abstract/Introduction:

Large grocery stores often speed up and artificially enhance the production of their produce in ways that lead to harmful side effects including cancer [3]. Local organic food markets are a great way to get the freshest fruits and vegetables that haven’t been genetically modified in dangerous and unnatural ways, while also contributing to your local agricultural economy [11]. Some organic growers don’t have storefronts; they sell through online orders and grow in popularity through word of mouth. Other organic growers only have roadside stands without any online presence. To promote these small businesses, we propose a website or application on which all local farmers can create an online presence for themselves and their produce. This website will also function as a way for consumers to search for, rate, and purchase produce across the different suppliers from one unified website.

A big limitation for local farmers is the restriction of physicality. An online marketplace would help local farmers grow their businesses beyond the boundaries of their current physical locations and will attract customers from further distances. Should a farmer wish to sell his produce online, an online marketplace would help facilitate same-day deliveries of perishable goods. The Internet has been a powerful enabler of such growth in other industries such handcrafted goods and collectibles in the last decade or so.

Another unique element of the proposed website is a social networking element to foster the growth and communication among the local farming industry and its members. The website could be a stage for promoting local events, contests, and meetups for farmers or customers of local markets. While there exist some websites that crawl and index webpages for current farmers, our proposed site provides farmers with a login and encourages personal branding, rather than simply allowing other sites to index and reference farmers’ addresses and phone numbers. We hope to develop a usable online marketplace for farmers by the end of the semester, including some basic social networking tools to lay the groundwork for a online local farmer community. Ideally, our website would support ratings for each type of produce, as well as a shopping cart feature to select and purchase produce from individual farmers.

Background/Review of Past Work:

Organic foods are a booming business; in 2009 they accounted for almost 4 percent of all food sales and continue to grow every year [8]. It is common knowledge that organic foods are grown through a safer process, they are healthier and even taste better. However, most of these foods are sold through conventional grocery stores. Shopping at local farmers not only helps to support the local economy but shoppers can visually see the environment in which the foods are grown [1]. Many people like the idea, but most will likely not take the time to research and shop at their local farmers markets. The advancements of technology have made life more convenient in a busy world. There are currently only a few relevant, albeit not mainstream, services that attempt to solve similar issues regarding organic produce.

One company, called the Suncoast Food Alliance was created to supply restaurants with locally grown foods [4]. Aside from the fact that this service only caters to restaurants, there is
no convenient technological means of using the service. The agricultural marketing service provided by the USDA is a great way to find local farmers and produce in your area. They even provide the types of payments accepted and the products available [2]. The interface, although very generic, is very easy to use. However, the USDA doesn't offer the capability to rate or comment on particular products and farmers. One of the key features of our project is a way for people to know that what they are getting is fresh. There have been concerns of food safety in farmers markets, more specifically, salmonella contaminated meats have been found in some farmers markets in D.C [9]. We provide a way for users to be aware of any safety issues.

Another issue is that congress has been putting tighter restrictions on the usage of the word ‘organic’ [13]. Although some farmers grow their foods without any chemicals, due to technicalities they are unable to label them as organic foods [13]. It is easy for people to see and taste whether a farmer has been growing their foods safely, and users or the farmers themselves will be able to address those concerns with our app. An iPhone application called “FarmFreshNYC” gives users market details, and a list of foods that are in season, as well as facts about certain foods [10]. The problem with this application is that the specific foods cannot be found under the market details. Our app will be more item specific.

Among the better products that we have discovered is a website called findlocalproduce.net, which provides a very simple interface of a map of the U.S. on which users can click on individual regions to find local produce [7]. The problem with this website is that the interface is the only good feature; although it provides a telephone number and address, there is no other information provided about the vendor. We plan to keep in contact with our produce vendors in order to update information regularly and provide as much information to the user as possible.

One of the more seemingly popular applications is Locavore – available for both iPhone and Android platforms [6]. This app has a lot of what we envisioned for our own project with the exception of one key feature -- the convenience of online ordering. This brings us to the last service we reviewed -- an online website called LocalHarvest. As soon as we visited the website, we knew that this website was intended for a very specific user. The website provides events, forums, newsletter, searches and even a way to shop online, but it took more than a few minutes of clicking around to fully understand how to use the search and shop features. The amount of navigation on the page is nearly overwhelming [12]. Anyone would clearly see that this website was intended for a true locavore and not the average user. There was also a lack of a mobile version, which is a lot more convenient and accessible. In our research we found a few solutions but no single product provided the convenience and features that our project has been focusing on. The two solutions that we felt were the best, LocalHarvest and Locavore were still missing our key feature: ratings.

**Target Users:**

Our proposed solution has two main target users: organic food consumers and organic farmers. One of the concerns that organic food consumers have is the lack of technological
means to compare products between different local vendors. When consumers visit a local organic food market, they are not sure who supplies their produce [5]. Hence, they cannot determine whether or not they are buying the best quality foods. Also, there has not been any initiatives in the past for the consumers to buy products online directly from their local farmers. This project gives the consumers (primary users) the opportunity of differentiating the quality in the organic foods by comparing the products among different farmers. Moreover, the project will provide HTML pages with information containing local farms in their area, ratings of the products by other consumers and a shopping cart to purchase directly from the local farmers. Also, the project will focus on its secondary user, the local farmers, who have not been able to reach out to different potential customers due to limitations on resources such as capital or technology [14]. It will give them the opportunity to sell their products and get feedback (as ratings, comments) from their consumers. Each farmer will also be able to create their own profile page that will contain information such as products available for sale, ratings and comments of the sold products, location of the farm, contact information and buyers who they have supplied to. Using all this information, a consumer will be able to evaluate whether a particular farmer is the best provider for a particular type of produce. For instance, if a farmer has been selling his or her products to stores like Whole Foods or My Organic Market (MOM’s) they will be able to list those stores on their page as an indication that they provide quality foods. Similarly, the ratings on each farmer’s page can be another tool to analyze the quality of their products.

What about the new farmers who might not have supplied to larger stores like Whole Foods or who do not have many ratings? Will they be able to benefit from this project? The answer is Yes. The new farmers will be able to list any buyers they have been in the process of setting up a contract with under the “Potential Buyer” list. As the new comers have to start somewhere, the “Potential Buyer” list would be a good tool for them to get started and gain some consumer confidence. A brief scenario walk-through of this project is provided in the following paragraph to demonstrate more details of the application and its use.

Scenario Walkthrough:

Our proposed solution to the problems regarding organic produce involves a website that will alleviate many of the problems that consumers face today. By using our website a user will be able to locate local organic farmers as well as buy their products online. Once a user has accessed our website, they will be able to search for local organic farmers in their area. Once the user has narrowed down the list of farmers, they will be able to use the rating system on the website to view which farmers have the best and worst reviews. After choosing the farmer they are most interested in, the user will then be able to view what products the farmer currently has for sale within the website. At this point, the person using our website will be able to order the produce that they want online and they will be able to have the food shipped or delivered to them. Once the buyer has received the food, they will be able to rate the farmer according to the quality of the food as well as the manner in which the food was delivered. Both of these mechanisms make finding and buying local organic produce easier and at the same time allow the user to view the previous reviews of the farmer to ensure that they receive a product worth paying for.
However, if a consumer decides that they do not wish to buy their produce online, there will also be a community page in which people will be able to view dates and locations in the future where organic farmers will be selling their goods in person. The consumer would then be able to search for locations in their area where farmers will be selling their produce. This allows consumers to buy their produce in person, if they so choose, and also gives them the opportunity to meet local organic farmers face to face and learn more about them personally and about their farming operation.
References

7. "Find Local Produce | for fresh fruits and vegetables straight from farmers." Find Local Produce | Search for Local Produce in Your Area | Find Local Produce | for fresh fruits and vegetables straight from farmers. 18 Feb. 2012 <http://www.findlocalproduce.net/>.
Appendix

Local organic food markets are a great way to contribute to your local economy and get the freshest fruits and vegetables that haven't been genetically modified in dangerous and unnatural ways. Large grocery stores often speed up and artificially enhance the production of their produce in ways that lead to harmful side effects including cancer [3]. Many organic growers don't have storefronts; they sell through online orders and grow in popularity through word of mouth. To promote these small businesses, we propose a website or application on which all local farmers can advertise their produce. This website will also function as a way for consumers to search for and rate produce across the different suppliers. There is currently no comparable interactive market for organic farmers and their customers.

Although the main idea of our project proposal has remained the same, we have added some features to our proposed website that will hopefully benefit both the consumers and the sellers of organic produce. One such addition is the ability for local organic farmers to sell their produce on our website. The consumers can then use our original rating system to rate the seller on food quality and other metrics on this online store. Each farmer who is listed on the site will also have the ability to create his or her own profile page which will include information about the farmer's biography, the farm's location, how long the farm has been growing organic food, and a list of the stores or wholesalers that the farm currently sells its produce to. Another change in our project proposal is the addition of a community page on our website. Through this community page, farmers and their customers will be able view upcoming events in the local community, such as farmers' markets, pick-your-own produce seasons, hay rides, and many more special events; this will make finding locally grown organic produce more enjoyable and recreational for consumers.