# **Business Proposal**

Gardener's Exchange Mobile Application

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#### Introduction

This project proposal is meant to provide possible examples for the creation of the Gardener's Exchange application for cell phones. This document allows us to introduce our customer, their request, data gathered through analysis, possible alternatives, and our recommended solution.

This document will provide a recommended solution based off the customer's requirements, and the plausibility of the tasks given to us. We have closely analyzed possible alternatives, and have made the decision that the custom build option, Gardener's Exchange, is the best option for the customer.

#### **Customer Details & Business**

Our customers for this project are Dr. Hernandez, who is an accounting professor at Taylor University, and his wife Mrs. Hernandez. Currently, no platform exists that is geared specifically toward selling and trading local produce and few communities these days are not dependent on the produce from stores. This project is meant to fill this gap and intended to develop communities of people who grow and sell their own fresh fruit, vegetables, and more. The Hernandez's are looking to begin with Upland, Indiana and then move out from there.

The participants in this project will be Dr. and Mrs. Hernandez, Professor Bauson, Dr. Nurkkala, and each ISA group. The Hernandez's will make decisions about the project be responsible for purchasing the final product. The ISA group will be responsible for developing the custom build and providing alternatives that follow the customer requirements.

#### Non-Customer Stakeholders

<u>Sellers</u>: Sellers are an extremely important stakeholder in the system. Sellers are the ones who will post produce that will eventually be sold. It is important to make the sellers feel comfortable using the system to enter and view their data. There will be a mobile interface to make the sellers feel more comfortable and to make the system more accessible.

<u>Buyers:</u> The most numerous non-customer stakeholders that will be interaction with the system. There will be more buyers using the system than any other role. The system will help the buyers find fresh produce that has been grown locally. There will be a mobile interface to make the buyers feel more comfortable and to make the system more accessible.

#### Motivation

The motivation behind this proposal is to create local communities that feel connected to each other and to the food they eat. Buying and selling home-grown foods provides more interaction between members of a community. Currently, most people go to local stores and buy processed foods that may not be entirely healthy and definitely not fresh, and that does not require interaction with other people in the community. Exchanging organic and home-grown foods through this application will improve the health of locals and lead to reduced waste from processed foods. In the future, the goal is to get more people in local communities into gardening with each other and their families.

## **Solution Alternatives**

## KT Situation Appraisal

List Concerns	Clarify Concerns	Severity	Urgency	Growth
Mindset	- Their mindset of income might hurt the start - The location of Upland would be harder to start an app than a larger setting	High - Still early, but with could affect the way that the app brings in revenue	Low - we haven't started	Low - their minds are set on what they want
Encouraging for other to grow crops	- This is not currently the focus of the application - User interaction and user experience would be what would guide this encouragement	Medium - If the app doesn't launch well, it won't grow	Low - again, we haven't started, but also we don't have much influence over potential crop growers	Low - this is early and something that would be added on later
Loss of buyer interaction	- Customers are what the application needs to grow and produce profit	High - Once there is a connection between the buyer and the seller they won't require the app	High - This is an obstacle for the app growing initially	Low - This is a static issues

#### RipeNear.Me

RipeNear.Me is a web application that allows users to sell their home-grown foods online and update the status of their foods to either "Growing" or "Ripe", in which a user can purchase ripe foods and track growing foods. Users can also "friend" other users and send messages to each other. The search function is primarily based on Zip location, with additional filters for categories of food, price ranges, and "Ripe" or "Growing" status. The items listed show a price per unit, title, rating, status, and the grower.

RipeNear.Me meets the musts of the customer's buy allowing users to buy and sell items with other users, and meets several of the customer's wants. There is a homepage of all items in a Zip code area, and a search by category exists within a Zip code area, which also implies a search by location. Users can also look up items without registering for an account. The overall design is intuitive and easy to look at and use.

However, there are several wants that RipeNear.Me does not meet. Currently, there is no trading system between users, and there is no way for our customers to make money off of this web application. There does not seem to be a transaction history kept anywhere.

## Budget

Initial Investment: \$0 Maintenance: \$0

Total Estimated Budget for 4 Years: \$0

## KT Decision Analysis

		RipeNear.Me				
Musts		Comments		Y/N		
User Posted Content		Users post items		Y		
User Buying and Selling		Buying and selling from us	Y			
Wants	Wgt	Comments	Score	Wgt'd Score		
Offer and Accept Trades	25%	No trading within the app	0	0		
Charge per transaction	15%	No	0	0		
Stream is the home page	15%	Yes Homepage is given after typing in the ZIP code	8	1.2		
Search by Keyword	15%	No, able to filter after ZIP search	5	0.75		
Filter between closeness and proximity	15%	Search by ZIP code	10	1.5		
Transaction History	5%	No	0	0		
Buyer can look at items without setting up an account	5%	Yes	10	.5		
Simple layout according to material design standards	5%	Yes	10	.5		
Totals	100	Very well put together		4.75		

#### Cost-Benefit Analysis

Some intangible benefits include that customers already use this web application and it's a very simple interface to use. Users can also "friend" other users, creating more of a community.

Some adverse consequences include that people could bypass using the website and do business with each other. Also, there is no way for our customer to generate income from a transaction charge.

#### **Net Present Value Calculations**

Year	0	1	2	3	4
Discount Rate	4%				
Costs					
Initial Investment	\$0				
Maintenance		\$0	\$0	\$0	\$0
Benefits	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Future Value	\$0	\$0.00	\$0.00	\$0.00	\$0.00
Present Value	\$0	\$0.00	\$0.00	\$0.00	\$0.00
Cash Flow	\$0	\$0.00	\$0.00	\$0.00	\$0.00
NPV	\$0.00				

#### The Farmer's Garden

The Farmer's Garden is a web application that facilitates buying and selling home-grown foods between users. Users are able to search for available listings in an area and look for certain types of foods and transactions, including trading, selling, swapping, or free. Users can also make requests for foods.

The Farmer's Garden meets our customer's musts since it is a web app for buying and selling foods to other users. There is a trading functionality and the homepage is a list of items for sale with default search parameters. The search function is achieved by searching by transaction type and category of food along with a Zip code and a radius up to 100 miles. The website is very simple to use, with minimal clicks to achieve most functions.

The downsides to using this web application include our customer not making money off of the transactions made. Also, there is no place to check for a transaction history, and users are required to register for an account in order to view listings.

## Budget

Initial Investment: \$0 Maintenance: \$0

Total Estimated Budget for 4 Years: \$0

## KT Decision Analysis

		The Farmer's Gard	den	
Musts		Comments		Y/N
<b>User Posted Content</b>		Users post items		Y
User Buying and Selling		Buying and selling from use	Y	
Wants	Wgt	Comments	Score	Wgt'd Score
Offer and Accept Trades	25%	Yes, barter transaction	10	2.5
Charge per transaction	15%	No, the app is owned by someone else	0	0
Stream is the home page	15%	Yes, home page lists item for sale with default search parameters	10	1.5
Search by Keyword	15%	Search by transaction type and category	9	1.35
Filter between closeness and proximity	15%	Yes, ZIP and search radius	10	1.5
Transaction History	5%	No	0	0
Buyer can look at items without setting up an account	5%	No	0	0
Simple layout according to material design standards	5%	Simple and easy to use website	9	0.45
Totals	100	Simple web app for finding other	foods	7.3

#### Cost-Benefit Analysis

Intangible benefits for using this product include a simple search function with a variety of options and setting up an account is easy. Users can also make barters and put up free items. The website also includes blog tutorials for gardening and other useful tips for starting a garden.

Some adverse consequences include that currently, there aren't very many users. This can be fixed if the idea sells to locals though. Our customer still can't charge per transaction with this web application.

#### Net Present Value Calculations

Year	0	1	2	3	4
Discount Rate	4%				
Costs					
Initial Investment	\$0				
Maintenance		\$0	\$0	\$0	\$0
Benefits	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Future Value	\$0	\$0.00	\$0.00	\$0.00	\$0.00
Present Value	\$0	\$0.00	\$0.00	\$0.00	\$0.00
Cash Flow	\$0	\$0.00	\$0.00	\$0.00	\$0.00
NPV	\$0.00		-		

#### Custom Build - Gardener's Exchange

Our "custom build" solution is the Gardner's Exchange mobile application for iPhone/Android. This application lets users view listings for food items within a default radius sorted by expiration. Registered users can buy, sell, and trade with other users in the application. The home feed is just a list of items for sale from local users.

The application will support trading between users, searching by keywords, filter by proximity, keeping a transaction history, and allow unregistered users to view listings. Also, our customer can do a small transaction fee on each order between users to generate profit. We will also keep material design standard when designing the look and feel of the application.

### Budget

Initial Investment: \$540 maintenance + \$25 publishing on Google Play Store

Maintenance: \$540/year
Total Estimated Budget for 4 Years: \$2,725

### KT Decision Analysis

		Gardner's Exchange				
Musts	Comme	Y/N				
<b>User Posted Content</b>	<b>User Posted Content</b>					
User Buying and Selling	User Buying and Selling					
Wants	Wgt	Comments	Score	Wgt'd Score		
Offer and Accept Trades	25%		10	2.5		
Charge per transaction	15%		10	1.5		
Stream is the home page	15%		10	1.5		
Search by Keyword	15%		10	1.5		
Filter between closeness and proximity	15%		10	1.5		
Transaction History	5%		10	.5		
Buyer can look at items without setting up an account	5%		10	.5		
Simple layout according to material design standards	5%		10	.5		
Totals	100			10		

#### Cost-Benefit Analysis

Some intangible benefits of our custom build include an easy to use interface for users, the ability to connect with other gardeners in the community, and facilitates a communal activity between family and friends.

However, there are some adverse consequences in building a custom application, including the idea that users could bypass using the app to buy/sell/trade foods and just do a local meetup. Also, the student development team behind building the application would not be as experienced as a professional development team, so additional problems may occur during development that wouldn't normally happen.

#### Net Present Value Calculations

Year	0	1	2	3	4
Discount Rate	4%				
Costs					
Initial Investment	-\$565				
Maintenance		-\$540	-\$540	-\$540	-\$540
Benefits	\$0.00	\$700.00	\$700.00	\$700.00	\$700.00
Future Value	-\$565	\$160.00	\$160.00	\$160.00	\$160.00
Present Value	-\$565	\$153.85	\$147.93	\$142.24	\$136.77
Cash Flow	-\$565	-\$411.15	-\$263.22	-\$120.99	\$15.78
NPV	\$15.78				

## Full KT Decision Analysis

		Gard	dner's Exc	hange	RipeN	Near.Me		The Farm	er's Gard	len
Musts	Musts		Comments		Comments Users post items		Y/N Y	Comments  Users post items		Y/N Y
User Posted Content				Y						
User Buying an	d Selling			Y	Buying and selling from user		Y	Buying and selling from user		Y
Wants	Wgt	Comments	Score	Wgt'd Score	Comments	Score	Wgt'd Score	Comments	Score	Wgt'd Score
Offer and Accept Trades	25%		10	2.5	No trading within the app	0	0	Yes, barter transaction	10	2.5
Charge per transaction	15%		10	1.5	No	0	0	No, the app is owned by someone else	0	0
Stream is the home page	15%		10	1.5	Yes Homepage is given after typing in the ZIP code	8	1.2	Yes, home page lists item for sale with default search parameters	10	1.5
Search by Keyword	15%		10	1.5	No, able to filter after ZIP search	5	0.75	Search by transaction type and category	9	1.35
Filter between closeness and proximity	15%		10	1.5	Search by ZIP code	10	1.5	Yes, ZIP and search radius	10	1.5
Transaction History	5%		10	.5	No	0	0	No	0	0
Buyer can look at items without setting up an account	5%		10	.5	Yes	10	.5	No	0	0
Simple layout according to material design standards	5%		10	.5	Yes	10	.5	Simple and easy to use website	9	0.45
Totals	100			10	Very well put to	ogether	4.75		Simple web app for finding other foods	

#### Recommendation

After our analysis of each solution, we believe that the custom build option, Gardner's Exchange, is the best option for our customer. According to our KTDA, it meets all of the customer's requirements without sacrificing highly weighted wants, as the other solutions do. Neither RipeNear.Me or the Farmer's Garden offer a way for our customer to make money outside of selling their own home-grown foods to other users.

Another advantage of this recommendation is that the custom build will be completed by a team of Taylor University students over the course of a semester, so it will not cost the customer very much to build the application. There will be a maintenance cost after the product is finished and released, and should be easily met with potential profits from the application if there is a large enough customer usage.