



Targeting Specific Consumer Types at Farmers' Markets

J. Dominique Gumirakiza, Graduate Research Assistant, Department of Applied Economics
Kynda R. Curtis, Associate Professor and Extension Specialist, Department of Applied Economics

Introduction

The purpose of this publication is to describe the consumer profiles and product features of importance for various farmers' market consumer groups. This publication examines consumer traits, as well as fresh product and market preferences by age group, by value type such as diet/health concerns or environmental concerns, and finally by product choice, such as locally or organically grown. This information will allow farmer vendors to determine the importance of customizing products and promotional methods to target specific farmers' market consumer groups.

Product customization is one option available to producers to meet the needs of specific markets. This strategy is useful in a business environment where a significant segment of consumers have preferences which differ from the market as a whole. Consumers today want products that are specific to their unique requirements, and they want them quickly and at an attractive price (Parametric Technology Corporation, 2008). Niladri and Nanda (2005) ascertain that the practice of firms customizing their products is pervasive. With regards to fresh produce, Produce Packaging Inc. (2013) claims that they work closely with their clients to give them the customized produce packaging they need.

Scotty's Fresh Produce Market and Deli (2013) gives customers the opportunity to customize their fresh fruit box orders. Customers order by phone and the order is then directly delivered to the customer. However, Chen and Ganesh (2002) warn vendors that equilibrium profits

may decrease with an increase in market differentiation when the marginal cost of addressability is sufficiently high. Niladri et al. (2005) argue that when the cost is low, consumers are better off with customization than with standard goods.

Survey Data Overview

This publication uses in-person consumer survey data of 1488 respondents collected at 12 farmers' markets in Nevada during summer of 2008 and four farmers' markets in Utah during the summer of 2011. The survey consisted of a number of questions regarding consumer shopping habits, demographic profiles, and attitudes and concerns about fresh produce. Respondents were also asked about the levels of importance they assign to various fresh produce attributes. Respondents were asked to indicate the importance they place on several product features on a scale of 1-5, where 1 stands for not important, 2 slightly important, 3 important, 4 very important, and 5 extremely important. The features included product variety, quality, value, product appearance, local produce, specialty item, product pricing, organic produce, product freshness, taste and knowing the grower. Respondents were also asked to indicate on a scale of 1-5, whether they 1 strongly disagree, 2 disagree, 3 unsure, 4 agree, or 5 strongly agree with several value and interest statements.

Consumer Characteristics by Age

Table 1 provides survey sample statistics for demographics and product attribute ratings for two

groups of respondents: (i) non-seniors, or those less than 65 years old and (ii) seniors, or those at least 65 years old. The first group constitutes 92% while the latter constitutes 8% of the entire sample. The stars indicate characteristics for which the two groups differ significantly. Seniors are significantly older (70 years old on average) than non-seniors (with 40 years old on average), less likely to be married, and not as interested in community supported agriculture (CSA) programs. The average income for seniors is \$67,612 annually, much less than that of non-seniors. The produce attribute ratings on the importance of product value, specialty item, product pricing and product taste are significantly lower among seniors. These results suggest that seniors tend to be less price-sensitive and place a higher importance on product appearance and having a variety of products to choose from.



Consumer Characteristics by Value Type

Next we compare three types of consumers, (i) those concerned about diet/health, (ii) agricultural enthusiasts and (iii) environmentalists. Respondents were asked to indicate their levels of agreement with statements about those topics. The rating scales were from 1-5, where 1 represents strongly disagree, 2 disagree, 3 unsure, 4 agree, and 5 strongly agree. Those who agree or strongly agree with the statement “I am concerned about my diet/health” are referred to “Diet/health conscious.” Consumers who responded otherwise are referred to “not diet/health conscious.” Those who agreed or strongly agreed with the statements “Open space for agriculture use is important for me” and “Supporting local farmers is important for me” are referred to as an “agriculture enthusiast”. Those who are unsure, disagree or strongly disagreed are referred to as a “non-agriculture enthusiasts.” Those who indicated that they agree or strongly agree with “I buy products with low environmental impact” are referred to as an “environmentalist” and “non-environmentalist” for those who responded otherwise.

Results show that 1378 (i.e., 93%) of the respondents are diet/health conscious, 1174 (i.e., 79%) respondents are agricultural enthusiasts, and 778 (i.e., 52%) are environmentalists. Table 2 presents averages of consumer characteristics and their importance for product features for each of the three types. First, results indicate that the percentages of females, married, those willing to join a CSA program, and home-gardeners in the diet/health conscious group are significantly higher compared to those for the non-diet/health conscious group. In the diet/health conscious group, 66% are female, 63% are married, 45% would like to join the community supported agriculture program and 58% operate gardens at their homes. An average diet/health conscious respondent is 42 years old, has a 4-year college degree and earns \$76,295 per year. In comparison with the non-diet/health conscious group, the diet/health conscious individuals place high importance on product quality, organic produce, product appearance, local origin, freshness, taste and knowing the grower of the produce. The extremely important features for the diet/health respondents are: product quality, freshness and taste.

Second, the percentages of females (68%), married (63%), those willing to join a CSA (48%), and home-gardeners (63%) are significantly higher among the agriculture enthusiasts compared to non-agriculture enthusiasts. An average agriculture enthusiast respondent is 43 years old, visits farmers markets 4 to 7 times per season, and has a 4-year college degree. This type of consumer considers product quality, freshness and taste to be extremely important for them when purchasing fresh produce. In comparison with the non-agriculture enthusiasts, the agriculture enthusiasts place high importance on product variety, quality, local origin, organic produce, product freshness, taste, knowing the grower, specialty and product value. The interest in eating out frequently among agriculture enthusiasts is significantly lower than that of non-agriculture enthusiasts.

Third, there are some differences between the environmentalists and non-environmentalists. Females, those willing to join a CSA, and home-gardeners are more prominent among environmentalists than they are among non-environmentalists. In fact, 68% of environmentalists are females, 49% would like to join CSA program and 61% do home gardening. A representative environmentalist is 43 years old, visits farmers markets 4 to 7 times per season, and has a 4-year college degree. With regard to importance assigned to the product features, the extremely important ones are product quality, freshness and taste. In comparison with

the non-environmentalists, the environmentalists place high importance on product variety, quality, local origin, specialty items, product freshness, taste and knowing the grower. The importance of product appearance is significantly low among the environmentalists. They tend to be more educated and place a higher value on local origin, knowing the grower or farmer, and organic production practices than the other two consumer groups.

Across these three types of consumers, the extremely important product attributes are product quality, freshness, and taste. Other attributes such as product variety, value, appearance, local origin, organic, pricing and knowing the grower/farmer are very important.



Consumer Characteristics by Product Preference

We further examine farmers' market consumers based on the importance of product features; (i) those that are the price sensitive, (ii) those who value local produce the most and (iii) those who highly value organic produce. Those who think product pricing is very or extremely important are referred to as "price sensitive consumers" and price insensitive for those who indicated otherwise. Those that indicated that locally grown produce is very or extremely important are referred to as "highly-local consumers" and low-local for those who responded otherwise. Likewise, those that indicated that organically grown produce is very or extremely important are referred to as "highly-organic consumers" and low-organic for those who indicated otherwise. Sixty-nine percent, 73% and 57% of the entire sample are price sensitive, highly local and highly organic respectively. Table 3 provides averages for consumer characteristics in each group.

Results in Table 3 indicate that on average, those who are price insensitive are significantly more educated, older, willing to join a CSA program, visit farmers' markets more frequently, and home-garden more than

those who are price sensitive. As for importance assigned to product features when shopping for fresh produce, price sensitive respondents have significantly higher importance for each of the features than price insensitive respondents. Price sensitive respondents consider product quality, value, pricing, freshness and product taste to be extremely important features for them.

The results indicate that the numbers of females (67%), those who are willing to join a CSA (48%), and home gardeners (61%) are significantly high among the highly-local consumers than for the low-local consumers. Highly-local consumers also show significant interest in attending farmers' markets frequently compared to low-local consumers. They are also not interested in eating out frequently. In terms of importance assigned to product features when shopping for fresh produce, highly-local respondents place a higher importance on each of the features. According to highly-local consumers, local produce, product quality, freshness and product taste are the extremely important product features.

As for the highly-organic and low-organic consumers, low-organic respondents are more likely to be married, older, and less much less likely to join a CSA (47%). Concerning the importance assigned to product features when shopping for fresh produce, highly-organic respondents place a higher importance on all features compared to low-organic respondents. The extremely important features for the highly-organic consumers are organic produce, product quality, freshness and product taste. Across all three consumer types, respondents did not eat out frequently, suggesting that they prepare most of their meals at home. Price sensitive, highly-local and highly organic consumers share the same views that product quality, freshness and taste are the extremely important product features they expect vendors of fresh produce to provide.

Conclusions

Using consumer survey data collected at farmers' markets in Nevada and Utah in 2008 and 2011 respectively, this publication describes various consumer groups and the importance of specific fresh produce attributes for each group. When targeting seniors as farmers' markets, growers should concentrate on providing clean, attractive produce, and provide a variety as well. Seniors are also unlikely candidates for a CSA program because they are less interested in CSAs and prefer to choose from a variety of products.

Married females, often involved in home gardening, permeate the consumer categories of diet/health conscious, agricultural enthusiast, and environmentalist. They are very interested in CSA programs and find local origin, organic produce, product quality, freshness and taste highly important, and are not price sensitive. Environmentalists place a higher importance on organic production methods than the other two consumer types. When targeting these consumers organic certification may be warranted.

When focusing on those consumers interested primarily in local produce, providing evidence of local origin is essential. When compared to consumer who prefer organic, they are less price sensitive and tend to place a lower level of importance on all produce characteristics outside of local origin. Organic consumers are more concerned with variety, price, product freshness and knowing the grower. Providing a variety of certified products and developing communication and relationships with organic consumers is recommended.

References

- Chen, Y., and Ganesh, I. 2002. Consumer Addressability and Customized Pricing. *Marketing Science* 21(2), 197-208.
- Niladri, B.S., and Nanda, K. 2005. On Customized Goods, Standard Goods, and Competition. Online at: <http://bschool.nus.edu/Departments/Marketing/papers%20for%20seminars/nandapaper.pdf>.
- Niladri, B.S., Ranran, R., and James, D.H. 2005. Customized Products: A Competitive Analysis. *Marketing Science* 24(4), 569-584.
- Parametric Technology Corporation (PTC). 2008. Online at: http://www.econocap.dk/assets/files/Link/3307_Modular_WP_EN.pdf
- Produce Packaging Inc. 2013. Customization. Online at: <http://www.producepackagingltd.com/packaging.asp>
- Scotty's Fresh Produce Market and Deli. 2013. Online at: <http://www.scottysfreshproduce.com/6.html>.

Utah State University is committed to providing an environment free from harassment and other forms of illegal discrimination based on race, color, religion, sex, national origin, age (40 and older), disability, and veteran's status. USU's policy also prohibits discrimination on the basis of sexual orientation in employment and academic related practices and decisions.

Utah State University employees and students cannot, because of race, color, religion, sex, national origin, age, disability, or veteran's status, refuse to hire; discharge; promote; demote; terminate; discriminate in compensation; or discriminate regarding terms, privileges, or conditions of employment, against any person otherwise qualified. Employees and students also cannot discriminate in the classroom, residence halls, or in on/off campus, USU-sponsored events and activities.

This publication is issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Noelle E. Cockett, Vice President for Extension and Agriculture, Utah State University.

Table 1: Characteristics of Senior and Non-Senior Respondents

Consumer Characteristic	Mean/Percentage	
	Respondents \leq 64 years	Respondents > 65 years
Age	40***	70
Education	4.42	4.37
Female	65%	66%
Married	63%*	56%
Join CSA	46%***	19%
Visits per season	4 to 7	4 to 7
Home gardener	58%	58%
Income	\$76,098**	\$67,612
Eat out frequently	2.79	2.72
Product variety	3.96	4.01
Product quality	4.59	4.59
Product value	4.25*	4.13
Product appearance	4.09	4.13
Produced locally	3.99	3.95
Specialty item	3.08***	2.75
Product pricing	3.94**	3.74
Organic production	3.61	3.56
Product freshness	4.61	4.54
Product taste	4.61*	4.53
Knows grower/farmer	3.55	3.53
Observations	1369	119

The ***, **, and * indicate respectively the 1%, 5% and 10% significance levels for statistically different means among the two groups.

Table 2: Characteristics of Respondents by Value Type

Consumer Characteristic	Mean/Percentage		
	Diet/health Conscious	Agricultural Enthusiast	Environmentalism
Age	42***	43***	43*
Education	4.45***	4.45**	4.55***
Female	66%***	68%***	68%***
Married	63%**	63%*	62%
Join CSA	45%***	48%***	49%***
Visits per season	4 to 7	4 to 7***	4 to 7***
Home gardener	60%***	63%***	61%***
Income	\$76,295***	\$75,527	\$75,558
Eat out frequently	2.78	2.75^^	2.75
Product variety	3.96	4.00***	4.03***
Product quality	4.60***	4.63***	4.64***
Product value	4.24	4.25*	4.24
Product appearance	4.11*	4.09	4.05^^^
Produced locally	4.00*	4.13***	4.20***
Specialty item	3.04	3.10*	3.14***
Product pricing	3.92	3.92	3.92
Organic production	3.63***	3.69***	3.94
Product freshness	4.61*	4.63***	4.65***
Product taste	4.61*	4.63***	4.65***
Knows grower/farmer	3.57*	3.68***	3.77***
Observations	1378	1174	778

The ***, **, and * (^^^, ^^, and ^) indicate respectively the 1%, 5% and 10% significance levels for higher (lower) averages among (i) diet/health conscious compared to non-Diet/health conscious, (ii) agricultural enthusiast compared to non-agricultural enthusiasts, and (iii) environmentalists compared to non-environmentalists. For example, 42*** indicates that we are 99% confident that the average diet/health conscious individual is 42 years old and is older than his/her counterpart. 4.05^^^ means that on average, we are 99% confident in claiming that environmentalists assign significantly low importance for product appearance as opposed to non-environmentalists.

Table 3: Characteristics of Respondents by Product Preference

Consumer Characteristic	Mean/Percentage		
	Price Sensitive	Highly-Local	Highly-Organic
Age	41 ^{^^}	42	42 [^]
Education	4.35 ^{^^^}	4.44	4.44
Female	66%	67%*	66%
Married	64%**	62%	60% ^{^^}
Join CSA	42% ^{^^^}	48%***	47%***
Visits per season	4 to 7 ^{^^^}	4 to 7***	4 to 7
Home gardener	56% ^{^^^}	61%***	57%
Income	\$74,835	\$74,821	\$75,056
Eat out frequently	2.83**	2.73 ^{^^^}	2.78
Product variety	4.13***	4.06***	4.16***
Product quality	4.69***	4.68***	4.70***
Product value	4.50***	4.33***	4.36***
Product appearance	4.31***	4.16***	4.19***
Produced locally	4.05***	4.55***	4.26***
Specialty item	3.27***	3.22***	3.31***
Product pricing	4.46***	3.98***	4.10***
Organic production	3.76***	3.82***	4.49***
Product freshness	4.72***	4.69***	4.75***
Product taste	4.72***	4.68***	4.70***
Knows grower/farmer	3.70***	3.76***	3.86***
Observations	1020	1084	845

The ***, **, and * (^{^^^}, ^{^^}, and [^]) indicate respectively the 1%, 5% and 10% significance levels for higher (lower) averages among (i) price-sensitive individuals compared to price insensitive, (ii) those with high ratings for local produce compared to those with low ratings, and (iii) those with high ratings for organic produce compared to their counterparts. For example, 42[^] indicates that we are 90% confident that among the highly-organic respondents, the average individual is 42 years old and is significantly younger than his/her counterpart. 4 to 7*** means that we are 99% confident in saying that individuals with high ratings of importance for locally-grown produce attend farmers' markets more frequently than those with lower ratings do.