

5-4-2023

Go Pick me Out a Winner: Visitor Perceptions and Priorities Regarding Operational Attributes at U-Pick Farms in Western New York

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Recommended Citation

Pitas, N., & Chen, Y. (2023). Go Pick me Out a Winner: Visitor Perceptions and Priorities Regarding Operational Attributes at U-Pick Farms in Western New York. *The Journal of Extension*, 61(1), Article 12. <https://doi.org/10.34068/joe.61.01.12>

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Cover Page Footnote

Thank you to Jarmila Haseler, Agricultural & Food Systems Educator, Cornell Cooperative Extension of Monroe County, New York. Thank you as well to the U-pick operators who graciously allowed us to survey their visitors.

Go Pick Me Out a Winner: Visitor Perceptions and Priorities Regarding Operational Attributes at U-Pick Farms in Western New York

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Abstract. This study seeks to identify visitor priorities for and perceptions of operational attributes at U-pick farms. Using a survey of farm visitors in the Rochester/Finger Lakes region, we applied importance-performance analysis to identify priorities, and the repositioning framework to create strategies for addressing them. Our results indicate that U-pick visitors generally perceive high levels of service quality, especially on attributes that they perceive as most important. Priorities for improvement include produce-related factors (price and availability of specific varieties) and visit logistics (information to plan a visit). Real, psychological, and associative repositioning strategies for Extension professionals and U-pick operators are discussed.

INTRODUCTION

At a time when rural areas face a variety of chronic and acute economic challenges, rural tourism development may offer a potential solution for some communities (Akin et al., 2015; Farquhar, 2018). Tourism development may be a ready fit in rural communities for a variety of reasons: many tourism enterprises revolve around natural resources and landscape qualities already present in rural areas; tourism development is comparatively inexpensive relative to other industries; tourism may provide economic benefits to other sectors within the community; and rural tourism may provide sustainable income to communities that are not otherwise competitively situated (Akin et al., 2015; Barbieri, 2013; Briedenhann & Wickens, 2004; Yu & Spencer, 2021). Agritourism is one form of rural tourism that has grown steadily in recent years (Whitt et al., 2019) and may be particularly relevant to Extension professionals and small-scale agricultural producers seeking to enhance their financial sustainability (Arroyo et al., 2013).

The agritourism sector in the United States encompasses a variety of activities “conducted by farmers or ranchers on their working agricultural operations for the enjoyment and education of visitors” (Jolly & Reynolds, 2005). Participation in and knowledge of agritourism is high among the general population at destinations such as farmers’ markets,

vineyards, and corn mazes (Norby & Retallick, 2012a; Whitt et al., 2019). Despite ongoing philosophical debate about the merits of localism (Young, 2021), these operations provide benefits to farmers by increasing revenue, community awareness, and the likelihood of intergenerational property transfer (Barbieri, 2013). At the community level, agritourism enhances conservation goals, delivers ecosystem services, and reduces residents’ tax burden (as land is maintained for agriculture rather than developed for other uses) (Barbieri, 2013; American Farmland Trust, 2016).

While agritourism may refer to a variety of operations, this article focuses on pick-your-own produce, or “U-pick,” operations. At U-pick farms, visitors pay not only for the chance to visit a working farm, but also to participate in the experience of harvesting fruits and vegetables on their own. U-pick farms are a popular form of direct marketing for small-scale agricultural producers of crops such as berries; tree fruits; and special crops such as pumpkins, Christmas trees, and flowers (Ernst, 2021). U-pick operations emerged in the United States during the Great Depression, when prices for produce dipped below the level required to cover the cost of farm labor, creating price incentives for producers to allow visitors to pick their own produce (Leffew & Ernst, 2014).

From their beginnings as an economic necessity, U-pick operations became a form of rural agritourism development during the post-World War II period (Leffew & Ernst, 2014). Today, U-pick operations are popular with many farmers, especially those within a reasonable driving distance of large population centers (Norby & Retallick, 2012), as they have the potential to provide substantial revenue from direct sales with little involvement by producers, diversify revenue streams, and provide stability in seasonal farm incomes (Infante-Casella et al., 2018; Tew & Barbieri, 2012). In addition to the economic and non-economic benefits of agritourism in general, U-pick operations have the potential to alter visitor attitudes towards locally produced food and influence their local purchase intentions in the future (Brune et al., 2020).

Although a significant body of research considers the benefits of U-pick operations (e.g., Barbieri et al., 2008; Barbieri, 2013; Brune et al., 2020), the behavior and motivation of operators (e.g., Carpio et al., 2008; Chase et al., 2013; Schroeder, 2004), and trends in participation (e.g., Norby & Retallick, 2012a), there exists a need for more information on potential visitors to these operations (Carpio et al., 2008; Norby & Retallick, 2012b). Sustainable, successful operation of U-pick farms requires a better understanding of visitor motivations, potential constraints to visitation, and operational factors that influence visitor satisfaction. Satisfied visitors may be more likely to spend greater amounts of money, visit repeatedly, and encourage peers to visit through word-of-mouth advertising (Dougherty & Green, 2011). A better understanding of the factors that are related to successful U-pick operations may be of particular use to operators themselves and to Extension professionals who work closely with operators.

Existing research provides a basis for understanding visitors to U-pick and other agritourism operations. In a survey of Iowa agritourism participants, Norby and Retallick (2012b) found that the most important motivations for participation included socializing with family and friends, supporting local farmers, and purchasing fresh products. On-site amenities such as restrooms, adequate parking, and the sale of food and drink were also seen as important, as were fresh and specialty products. Che et al. (2006) reported similar results among agritourists in Michigan, emphasizing the importance of fresh, local produce to the overall visitor experience.

Despite existing research on visitor demographics and their potential motivations, significant questions remain regarding visitor preferences for operational attributes at U-pick farms. In this article, we expand on previous efforts to understand visitors to U-pick operations by utilizing a sample from four such operations in the Rochester/Finger Lakes region of New York State. To do so, we combine two separate techniques: importance-performance analysis (IPA)

and the repositioning framework. IPA and the repositioning framework may both be applied separately, but when combined, they provide a powerful framework for informing decision making in an Extension context (Pitas et al., 2020).

IMPORTANCE-PERFORMANCE ANALYSIS

IPA is a strategy for evaluating survey data with the goal of improving organizational performance and user satisfaction (Martilla & James, 1977). IPA has been widely used in contexts such as tourism (e.g., Lai & Hitchcock, 2015; Oh, 2001), recreation management (e.g., Powers et al., 2021) and Extension (e.g., Pitas et al., 2020; Pitas et al., 2017; Warner et al., 2016). The relative simplicity of IPA is an attractive feature for applications in an Extension context, as the necessary calculations can be performed without specialized statistical software or knowledge. IPA may be described as a three-step process:

1. Evaluators and key stakeholders (e.g., experts, operators) work to compile a list of important characteristics, traits, or aspects of the service in question.
2. Using Likert-style items, survey respondents rate each of these variables both in terms of their perceived importance and their perceived performance.
3. Using each item's mean importance score (y-axis) and mean performance score (x-axis), evaluators create an IP-matrix. The IP-matrix is a two-dimension figure where variables are categorized based on their relative importance and performance (see Figure 1).

Quadrant boundaries may be defined as either the mid-point on the scale (i.e., at "3" on a 5-point scale), or by using a calculated mean method (i.e., at the grand mean of all the importance or performance items). Although the scale mid-point method is simpler, the calculated mean method is generally considered more rigorous, gives greater flexibility to researchers in interpreting their results, and is more likely to provide useful data (Bacon, 2003; Lai & Hitchcock, 2015).

Items that are high in both importance and performance fall into quadrant I (*keep up the good work*). Those items that are higher than average in performance, but lower than average in importance fall into quadrant II (*possible overkill*). Items lower than average in both performance and importance fall into quadrant III (*low priority*). Attributes that are lower than average in performance, but higher than average in importance fall into quadrant IV (*concentrate here*). Items in quadrant IV are identified as priorities for the allocation of resources, as they represent areas viewed as important, but of lower-than-average quality. Paired-samples t-tests are then used to determine if there are significant

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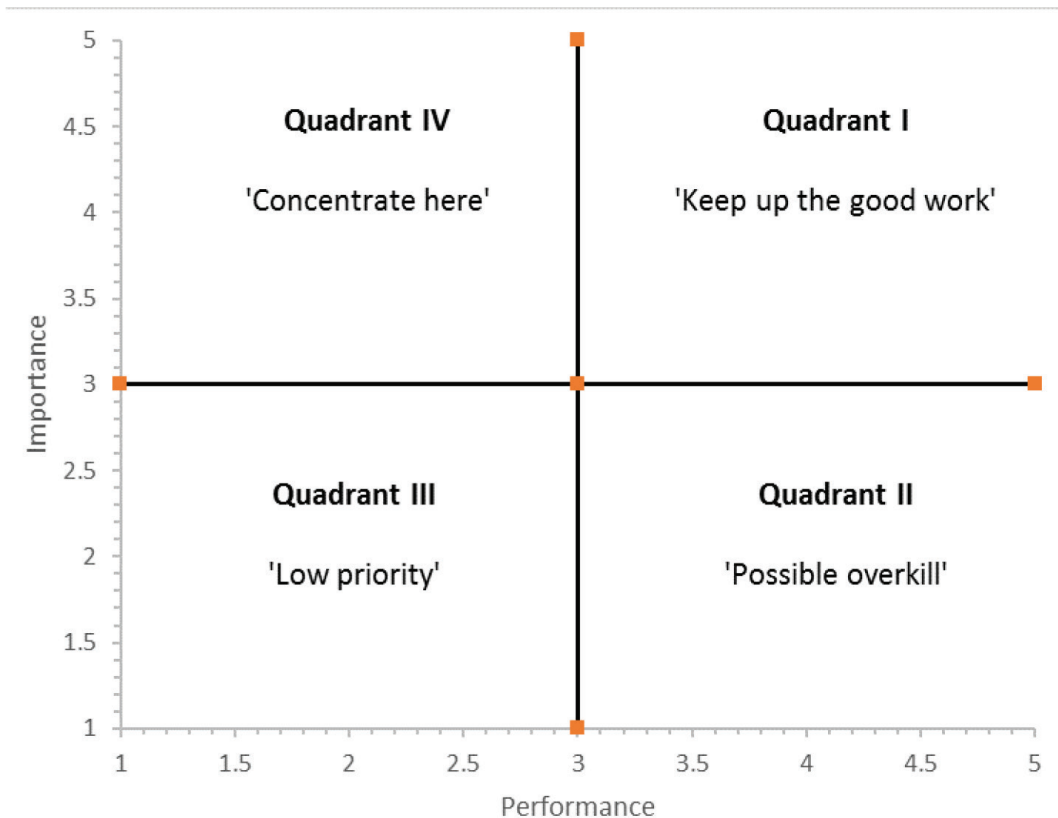


Figure 1. Example importance-performance matrix. *Source:* Pitas et al., 2020; adapted from “Importance-Performance Analysis,” by J. A. Martilla and J. C. James, 1977, *Journal of Marketing*, 41(1), p. 78.

differences between importance and performance scores for attributes in quadrant IV, with particular management focus on those attributes with significant gaps (Chen, 2014; Lai & Hitchcock, 2015).

REPOSITIONING

As an organization’s position refers to how key stakeholders perceive it, repositioning is the process of attempting to change those perceptions (Ries & Trout, 1986). Like IPA, repositioning is a relatively simple, three-step process.

1. Key stakeholder groups are identified.
2. Issues of concern for those key stakeholder groups are identified.
3. The organization in question works to communicate with key stakeholder groups how they contribute to those issues of concern, changing perceptions about the organization.

The final step is the actual repositioning effort, and organizations may attempt to reposition in several specific ways (Ries & Trout, 1986). *Real repositioning* strategies involve actual changes to an organization’s activities, with the goal of addressing an issue of concern. *Psychological repositioning* strategies are attempts to alter stakeholder perceptions about an organization and its value. *Associative repositioning* is the process of partnering or associating with other organizations that make a desired contribution to an issue of concern. Finally, *competitive repositioning* strategies consist of activities that attempt to alter stakeholder perceptions of a rival organization. Although real, psychological, and associative positioning may be of significant value to Extension professionals, we believe that competitive repositioning strategies run counter to the public-service mission of Extension and exclude those here.

METHOD

As part of a larger Extension project examining the needs of local farmers, we collected the data for this analysis through an on-site survey of visitors to four U-pick operations in the Rochester/Finger Lakes region of New York. U-pick operations were selected to ensure similarity across sites in terms of their location (within the suburban Rochester area) and the types of services (U-pick) and produce offered (peaches and a variety of berries). During July and August of 2020, a total of 222 surveys were collected, with a response rate of approximately 68% (104 refusals). On two farms, surveyors stationed themselves near the entrance and exit points and intercepted groups as they were leaving the farms; in this instance, respondents pulled their vehicle into a predetermined area to take the survey. On the other two farms, surveyors stationed themselves near the checkout point and intercepted groups after they had paid for their purchase. In both cases, surveyors asked whether the adult member (age 18 or older) with the next birthday would be willing to complete the survey. In the event of a refusal, they then asked the adult with the next birthday; this continued either until an adult took the survey or there were no more adults in the group. Sampling was stratified to include morning and afternoon time slots to allow surveying of various potential user groups (e.g., older adults, adults with children, etc.). In addition, although visitation was highest on weekends, surveyors were also onsite for shifts during the week.

In addition to demographic questions, respondents were presented with a list of 18 attributes of U-pick farms and the visitor experience at U-pick farms. The process of identifying potentially important aspects of a U-pick operation was guided in part by previous literature addressing agritourism operations (e.g., Che et al., 2006; Dougherty & Green, 2011; Norby & Retallick, 2012a & 2012b) and through consultation with local Extension professionals, past U-pick consumers, and experienced program evaluators. Survey items were generated in four main areas of the U-Pick experience: *produce-related factors*, *onsite conditions and amenities*, *staff-related factors*, and *visit logistic factors*. The writers of the survey items pilot tested each item with a small group of experts and modified the items multiple times prior to the final version (see Table 1).

Following the IPA process described above, respondents were first asked to rate the importance of these attributes on a 5-point Likert-style scale from 1 (*not at all important*) to 5 (*extremely important*). Next, respondents rated the quality of the same attributes at the U-pick farm they had visited on a 5-point Likert-style scale from 1 (*very poor*) to 5 (*exceptional*). Then, surveyors plotted the attributes on an IP-matrix, divided using the calculated mean method (Bacon, 2003). Finally, they used paired-sample t-tests to analyze the

Table 1. Importance and Performance Items

<i>Produce-related factors (PRF)</i>
Taste of produce
Availability of desired produce variety
Quality of produce
Price of produce
<i>Onsite conditions and amenities (OCA)</i>
Forms of payment accepted
Onsite information/signage
Cleanliness of farm
Onsite restroom
Food or drink for purchase
Handicap accessibility
Pandemic-related safety measures
<i>Staff-related factors (SRF)</i>
Helpfulness of staff
Ease of checkout process
Friendliness of staff
<i>Visit logistics (VL)</i>
Ease of parking
Ease of finding the farm
Location of farm
Information to plan your visit

gap between attributes that fell into quadrant IV (*concentrate here*). Surveyors interpreted the results from the IPA using the repositioning framework described above.

RESULTS

Respondents (n = 222) were overwhelmingly female (72.3%) and Caucasian (88.2%). The average age was 50.22 years, with a plurality of respondents being 51–65 years old (27.2%). Nearly half of respondents held graduate or professional degrees (44.9%), and nearly one-third had undergraduate degrees (32.3%). 23.5% of respondents reported household income between \$40,000 to \$60,000, and 20.6% reported \$80,000 to \$100,000. Older adults with no children represented the single largest group (32%), followed by two-parent or two-guardian households (25.2%) (See Table 2.)

Respondents rated *quality of the produce* (m= 4.59), *taste of the produce* (m= 4.55), and *helpfulness of staff* (m= 4.10) as the most important single items; the highest-quality items were *friendliness of staff* (m= 4.78), *ease of checkout process* (m= 4.75), and *helpfulness of staff* (m= 4.74) (see Table 3).

Quadrant boundaries were calculated at 3.46 for importance (vertical axis), and 4.36 for performance

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Table 2. Participant Demographic Characteristics

Demographic Characteristic	n	% or Mean
<i>Sex/Gender</i>		
Female	146	72.3
Male	51	25.2
Prefer not to say/other	5	2.5
<i>Age (in years)</i>		
		50.22
18–35	45	22.3
36–50	51	25.2
51–65	56	27.7
66 or older	39	19.3
Missing*	11	5.4
<i>Highest level of education</i>		
Some high school	0	0
High school diploma or GED	11	5.6
Some college or Associate's degree	32	16.2
Bachelor's degree	64	32.3
Graduate or professional degree	89	44.9
Don't know/prefer not to disclose	2	1.4
<i>Household structure</i>		
Single parent/guardian	11	4.9
Two parents/guardians, one wage earner	28	12.6
Two parents/guardians, two wage earners	56	25.2
Adults under 54, no dependents	15	6.8
Adults over 55, no dependents	71	32
Prefer not to disclose	41	18.5
<i>Income</i>		
\$40,000 or less	11	8
\$40,001 to \$60,000	32	23.5
\$60,001 to \$80,000	13	9.5
\$80,001 to \$100,000	28	20.6
\$100,001 to \$120,000	18	13.2
\$120,001 to \$140,000	11	8
\$140,001 to \$160,000	6	4.4
\$160,001 to \$180,000	2	1.4
\$180,001 or more	13	9.5
Don't know/prefer not to disclose*	86	
<i>Race/Ethnicity (choose all that apply)</i>		
American Indian or Alaskan Native	0	0
Asian	12	6.4
Black or African American	1	.5
Hispanic/Latino	5	2.6
Native Hawaiian or Pacific Islander	0	0
White	165	88.2
Refuse/other/don't know	9	4.8
Missing*	10	4.9

* Does not count towards total or percentage values.

(horizontal axis). Our IPA indicated that variables fell across quadrants I (*keep up the good work*), III (*low priority*), and IV (*concentrate here*), with no attributes falling into quadrant II (*possible overkill*). See Table 3 for a description of attribute locations, and Figures 2 and 3 for a visual representation of the IP matrices. Table 4 provides a more detailed breakdown of the three attributes (availability of desired produce, price of produce, and information to plan your visit) that fell into the *concentrate here* portion of the IP matrix, along with the result of paired-sample t-tests comparing importance and performance values.

DISCUSSION

From their beginnings as an economic necessity for small agricultural producers, U-pick farms have become a popular form of agritourism in the United States. A significant body of research addresses their potential benefits, trends in consumer participation, and the actions of operators. Despite this, a need exists for more information on visitors, particularly their perceptions and preferences. Visitor satisfaction is a key consideration for agritourism operations, as satisfied visitors are more likely to purchase goods, visit repeatedly, and encourage their peers to visit. In this article we attempt to help bridge this gap by drawing on a sample of visitors to four U-pick operations in the Rochester/Finger Lakes region of New York State. In addition to the potential applications for Extension professionals and U-pick operators, this work contributes to the continuing need to develop and strengthen local food tourism experiences (Okumus, 2020).

Respondents felt that the U-pick farms generally performed well, especially on the attributes that were ranked as most important. Of the 13 items with an importance value greater than the mean, ten fell into Quadrant I, indicating that respondents felt operators should “keep up the good work.” Only three items fell into quadrant IV, indicating that operators should consider focusing their time and resources on improving performance in those areas. Of these three items, two (availability of desired variety and price of produce) were produce-related factors, while one (information to plan visit) was related to visit logistics.

With regards to produce-related factors, visitors were highly satisfied with the taste and quality of the produce but felt that availability and price were areas that needed work. The relative importance of these and other produce-related factors is consistent with past research on direct-to-consumer agricultural operations (Che et al., 2006; Govindasamy et al., 2002; Norby & Retallick, 2012b). The relatively low performance ratings on availability and price would seem to indicate that operators should prioritize certain varieties of produce deemed desirable and continue to price competitively relative to other types of vendors. Respondents

Table 3. Descriptive Statistics of Importance and Performance Items

	Mean Importance ^a (SD)	Mean Performance ^b (SD)	Quadrant
<i>Produce-related factors</i>			
Quality of produce	4.59 (.73)	4.69 (.51)	I
Taste of produce	4.55 (.81)	4.68 (.55)	I
Availability of desired produce variety	3.95 (1.14)	4.34 (.85)	IV
Price of produce	3.67 (1.09)	4.20 (.84)	IV
<i>Onsite conditions and amenities</i>			
Cleanliness of farm	4.02 (1.05)	4.55 (.65)	I
Pandemic-related safety measures	3.92 (1.30)	4.51 (.75)	I
Onsite information/signage	3.46 (1.17)	4.25 (.82)	II
Onsite restroom	3.07 (1.41)	3.71 (1.30)	II
Forms of payment accepted	2.97 (1.37)	3.90 (.99)	II
Handicap accessibility	2.82 (1.52)	3.68 (1.27)	II
Food or drink for purchase	1.94 (1.18)	3.35 (1.32)	II
<i>Staff-related factors</i>			
Helpfulness of staff	4.12 (.97)	4.74 (.52)	I
Friendliness of staff	4.10 (.96)	4.78 (.49)	I
Ease of checkout process	4.07 (.95)	4.74 (.52)	I
<i>Visit logistics</i>			
Ease of parking	3.93 (1.03)	4.72 (.58)	I
Ease of finding the farm	3.77 (1.10)	4.67 (.59)	I
Information to plan your visit	3.66 (1.18)	4.34 (.82)	IV
Location of farm	3.63 (1.07)	4.54 (.68)	I

^aMeasured on a 5-point scale from 1 (not at all important) to 5 (extremely important)

^bMeasured on a 5-point scale from 1 (very poor) to 5 (exceptional)

Table 4. Descriptive Statistics of Quadrant IV—Concentrate Here

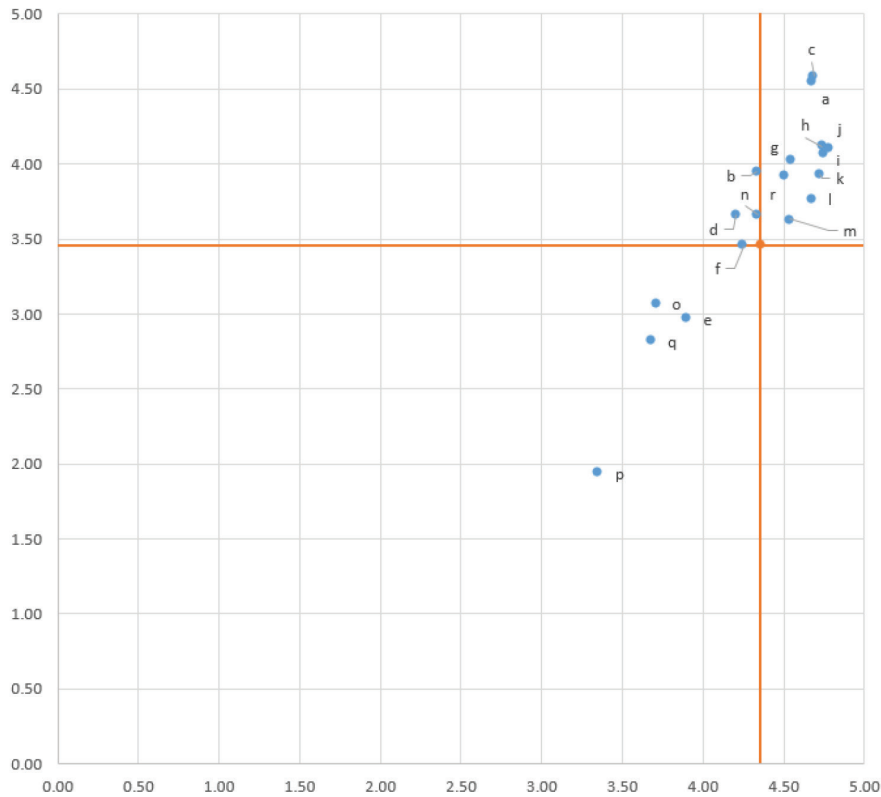
	Importance ^a				Performance ^b		t value
	Not at all – Somewhat	Moderate	Very – Extremely	Very poor – Poor	Moderate	Very good – Exceptional	
Availability of desired produce	23 (10.6%)	47 (21.7%)	147 (67.7%)	3 (1.5%)	35 (17.2%)	165 (81.3%)	-3.92*
Price of produce	26 (11.9%)	75 (34.4%)	117 (53.7%)	4 (1.9%)	45 (21.3%)	162 (76.7%)	-6.34*
Information to plan your visit	35 (16.1%)	59 (27.2%)	123 (56.7%)	2 (1%)	39 (19.5%)	159 (79.5%)	-6.60*

^aResponses of 1 (not at all) and 2 (somewhat), and 4 (very) and 5 (extremely) have been combined

^bResponses of 1 (very poor) and 2 (poor), and 4 (very good) and 5 (exceptional) have been combined

*Significant at the p < .001 level

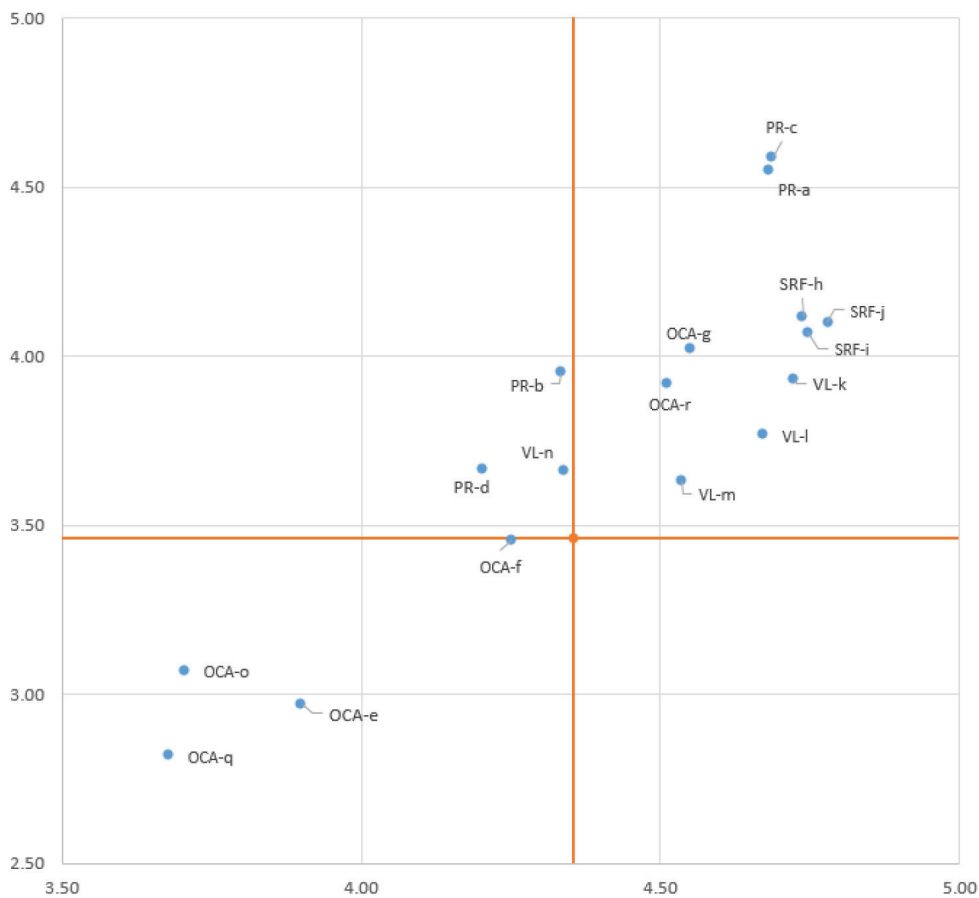
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Legend

- a** Taste of produce
- b** Availability of desired variety
- c** Quality of produce
- d** Price of produce
- e** Forms of payment accepted
- f** Onsite information/signage
- g** Cleanliness of farm
- h** Helpfulness of staff
- i** Ease of checkout
- j** Friendliness of staff
- k** Ease of parking
- l** Ease of finding farm
- m** Location of farm
- n** Information to plan visit
- o** Restrooms
- p** Food or drink for sale
- q** Handicap accessibility
- r** Pandemic related safety

Figure 2. Importance-performance matrix.



Legend

- a** Taste of produce
 - b** Availability of desired variety
 - c** Quality of produce
 - d** Price of produce
 - e** Forms of payment accepted
 - f** Onsite information/signage
 - g** Cleanliness of farm
 - h** Helpfulness of staff
 - i** Ease of checkout
 - j** Friendliness of staff
 - k** Ease of parking
 - l** Ease of finding farm
 - m** Location of farm
 - n** Information to plan visit
 - o** Restrooms
 - p** Food or drink for sale
 - q** Handicap accessibility
 - r** Pandemic related safety
-
- PR** Produce-related factors
 - OCA** Onsite conditions and amenities
 - SRF** Staff-related factors
 - VL** Visit logistics

Figure 3. Detail of importance-performance matrix.

also felt that the farms needed to prioritize providing the necessary information for planning a visit. Anecdotally, several respondents stated that they had intentionally visited to pick a specific variety of produce they had seen on advertisements (e.g., strawberries, blueberries), only to find that they were no longer available. Based on this information, operators should strive to provide up-to-date information on what varieties are available across multiple media platforms (e.g., website, signage, print advertising, social media).

Notably, all the items rated as low priority (quadrant III) were related to onsite conditions and amenities. Respondents perceived that amenities such as restrooms, multiple accepted payment methods, and the sale of food and drink were not highly relevant to a satisfying U-pick experience, which runs counter to some previous research on agritourism operations (e.g., Che et al., 2006; Norby & Retallick, 2012b). Just as the items in quadrant IV provide a potential place to allocate additional resources, operators may consider reallocating some resources currently used on items in quadrant III. For example, operators may wish to discontinue selling food and drink onsite or to allocate fewer resources to this amenity. Operators may also wish to discontinue accepting credit cards or discourage their use as a form of payment; cash and electronic fund transferring systems (e.g., Venmo) are widely accepted and do not incur the same fees as credit cards. Similarly, although operators may wish to continue offering restrooms, they may be able to offer fewer restrooms or restroom with fewer amenities. It is also possible that the timing of data collection—during a period of heightened sensitivity regarding the safety of indoor spaces—may have skewed results related to restrooms.

While handicap accessibility and information and signage onsite also fell into this quadrant, caution should be used in interpreting those results. The survey did not assess whether or not respondents needed accommodation during their visit, and those who did could potentially view handicap accessibility as more important. Also, operators must meet minimum standards of handicap accessibility as both a legal and moral obligation, and they should be cautious in reallocating any resources currently applied here. While information and signage also fell into the low priority quadrant, it is close to the dividing line with quadrant IV. This, combined with the categorization of information to plan a visit as a high priority, suggests that operators should focus on communication both before and during the visit.

APPLICATION OF THE REPOSITIONING FRAMEWORK

To address the priorities identified through IPA, U-pick operators should consider the application of real, psychological, and associative repositioning strategies. In the sections that follow, we provide examples for Extension professionals and operators to use or to draw information from in the creation of their own strategies.

Example real repositioning strategies may include:

- Determining which varieties of produce are most desired by potential visitors and, to the extent possible, providing greater opportunity to pick those varieties.
- Pricing produce competitively relative to other vendor types, providing bulk discounts, providing flexible pricing during off-peak hours, providing a “punch card” for repeat visitors, etc.
- Ensuring that information on available varieties and prices of produce is updated regularly across all information channels (e.g., website, social media, telephone message).
- Example psychological repositioning strategies may include:
 - Correcting potential misconceptions among visitors that U-pick produce is universally expensive, as it is often competitively priced relative to other vendors (Govindasamy & Nayga, 1996). Although niche or specialty produce may be relatively expensive, many U-pick producers are able to set competitive prices thanks to significant savings associated with direct marketing production (Bruch & Ernst, 2011).
 - Communicating effectively the benefits that U-pick operations provide to culturally important concepts such as farm traditions/rituals, family cohesion, the local economy, etc. (Rumble & Lundy, 2017).
 - Marketing varieties of produce other than those which are most commonly known or perceived as desirable in addition to more popular mainstream varieties. Introducing visitors to additional varieties may allow operators to extend their effective growing season, differentiate themselves from competitors, etc.
 - Emphasizing the role of small farms in supporting local institutions deemed important by consumers (Rumble & Lundy, 2017).
 - Finally, example associative repositioning strategies may include:
 - Partnering with a highly visible community organization which enjoys a positive position, such as a college/university, tourism and visitor bureau, etc.
 - Providing produce to local food banks or other community-based non-profit organizations.
 - Working with highly visible local chefs and local restaurants to showcase their produce, incentivizing diners to visit and pick their own. However, research indicates that many chefs lack sufficient information about locally produced farm products, so this

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strategy may involve an educational component on the part of U-pick operators (Curtis et al., 2008). It may also be possible to reposition more than one factor at a time, addressing multiple items which fell into quadrant IV, or utilizing items identified as strengths to help address emerging priorities. For example:

- Operators may wish to leverage staff members to help provide information onsite about additional varieties of produce beyond those which are most commonly known/perceived as desirable.

CONCLUSION

The results presented in this manuscript provide useful, actionable information for Extension professionals and U-pick operators hoping to address priorities identified by visitors. Previous research confirms the importance of experiential elements in determining visitor satisfaction, which in turn influences re-visit intentions (Cole & Chancellor, 2009). Other stakeholders and priorities exist, but given the importance of return visitors to the economic sustainability of U-pick operations (Che et al., 2006), visitor satisfaction must be a primary concern (Dougherty & Green, 2011). The examples provided in this manuscript offer several realistic, potentially cost-effective strategies—real, psychological, and associative—for doing so. Although some strategies may be implemented by individual operators, Extension professionals should consider facilitating those strategies that require action by more than a single operator. For example, promoting public awareness of the benefits of U-pick operations, or facilitating partnerships with community organizations, could be more easily and effectively accomplished in coordination with Extension.

A significant caveat to the conclusions drawn from this survey involves an overreliance on the priorities identified through the IPA process. While IPA is useful as a means of identifying priorities defined by visitors, operators and Extension professionals must combine this information with their knowledge and experiences when creating and applying repositioning strategies (Pitas et al., 2020). Although visitor satisfaction and perceptions are important, U-pick operations naturally involve multiple stakeholders (e.g., the public, operators, tourism/visitor bureaus, etc.) and balance many competing demands (e.g., visitor preferences, financial considerations, the realities of climate and weather, etc.).

Despite the potential utility of these results, some limitations must be acknowledged and potential topics for future research must be discussed. First, multiple factors may limit the generalizability of the results we present, including the context of data collection during the COVID-19 pandemic and the locally limited sample of U-pick operations in the Rochester/Finger Lakes region.

While surveyors made an effort to survey respondents at a variety of locations and using a purposeful sampling strategy, we also note that the data utilized in this analysis comes from a convenience sample. Future work should address these limitations through a larger, more representative sample across a broader geographic area; future analysis will also be necessary to understand what impact the pandemic may have had on visitor perceptions and priorities. Also, while the present analysis identified priorities for improvement based on visitor perceptions, it did not explicitly address visitor satisfaction or service quality; future research should directly assess visitor satisfaction and factors related to satisfaction, spending, and intentions to return.

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